JPRS 75199 26 February 1980

0

## East Europe Report

0

**ECONOMIC AND INDUSTRIAL AFFAIRS** 

No. 1982



JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports</u>
<u>Announcements</u> issued semi-monthly by the National Technical
Information Service, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the <u>Superintendent of Documents</u>, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS 75199 26 February 1980

## East Europe Report

**ECONOMIC AND INDUSTRIAL AFFAIRS** 

No. 1982

REPORT DOCUMENTATION	1. REPORT NO. JPRS 751	99	3. Recipient's Accession No.
PAGE  Title and Subtitle			5. Report Date
	T: ECONOMIC AND INI	DUSTRIAL AFFA	IRS, 26 February 1980
No. 1982			6.
. Author(s)			8. Performing Organization Rept. No.
Performing Organization Name			10. Project/Task/Work Unit No.
	s Research Service		
1000 North Glebe Arlington, Virgin			11. Contract(C) or Grant(G) No.
Allington, virgi	114 22201		(C)
12. Sponsoring Organization Name	and Address		(G)  13. Type of Report & Period Covered
			as. Type of Report & Period Covered
As above			14.
15. Supplementary Notes			
The state of the s			ic theory, organization, development of trade within
planning and mana CEMA and outside machine, electron	gement; major agreem the Bloc; articles o	ments on and on on all aspect equipment ind	development of trade within s of the materials, services, ustries; and concepts and
planning and mana CEMA and outside machine, electron attainments in ag	agement; major agreement; major agreement; the Bloc; articles of the Bloc, and precision exprised the Bloc, and precision exprised the Block and precision expressions.	ments on and on on all aspect equipment ind	development of trade within s of the materials, services, ustries; and concepts and
planning and mana CEMA and outside machine, electron attainments in ag	gement; major agreement; major agreement; the Bloc; articles of the Bloc, and precision of the Bloc, articles of the Bloc, articl	ments on and on on all aspect equipment ind	development of trade within s of the materials, services, ustries; and concepts and
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis a. Descri X International X Albania	gement; major agreement; major agreement; the Bloc; articles of the Bloc, and precision of the Bloc, articles of the Bloc, articl	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis a. Descri X International X Albania X Bulgaria Y Czechoslovakia German Democra	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articulture, forestry, articu	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  I. Document Analysis a. Descrip X International X Albania X Bulgaria Y Czechoslovakia German Democra X Hungary	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articulture, forestry, articu	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis a. Descrip X International X Albania X Bulgaria Y Czechoslovakia German Democra X Hungary X Poland	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articulture, forestry, articu	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis s. Descrit X International X Albania X Bulgaria X Czechoslovakia German Democra X Hungary X Poland X Romania	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articulture, forestry, articu	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis a Descrip X International X Albania X Bulgaria Y Czechoslovakia German Democra X Hungary X Poland	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articulture, forestry, articu	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis s. Descrip X International X Albania X Bulgaria Y Czechoslovakia German Democra X Hungary X Poland X Romania	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articulture, forestry, articu	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.
planning and mana CEMA and outside machine, electron attainments in ag  17. Document Analysis s. Descrip X International X Albania X Bulgaria Y Czechoslovakia German Democra X Hungary X Poland X Romania	gement; major agreement the Bloc; articles of the Bloc; articles of the Bloc; articles of the Bloc; and precision of the Bloc; and precision of the Bloc; articles of the Bloc;	ments on and on all aspect equipment independent independent and the food	development of trade within s of the materials, services, ustries; and concepts and d industry.

Sold by NTIS

18. Availability Statement Unlimited Availability 21. No. of Pages

160

22. Price

19. Security Class (This Report)

UNCLASSIFIED

20. Security Class (This Page) UNCLASSIFIED

# EAST EUROPE REPORT ECONOMIC AND INDUSTRIAL AFFAIRS

No. 1982

Contents	PAGE
INTERNATIONAL AFFAIRS	
CEMA Nations Showing Interest in Western Licenses (HANDELSBLATT, 24 Dec 79)	1
International Liner Service of CEMA States in 1978 Reviewed (K. Kostov; TECHNIKA I GOSPODARKA MORSKA, Nov 79)	4
ALBANIA	
Progress in Power Plant Construction Hailed (Emin Musliu; ZERI I POPULLIT, 25 Dec 79)	22
BULGARIA	
Fulfillment of 1979 Economic Plan Reported (RABOTNICHESKO DELO, 23 Jan 80)	26
Avoiding Manipulation of Figures Urged (Editorial; SCHETOVODSTVO I KONTROL, No 10, 1979)	35
Minister of Metallurgy and Mineral Resources Interviewed (Stamen Stamenov Interview; RUDNICHAR, 3 Jan 80)	38
Minister of Energy Interviewed: Reports Achievements (Nikola Todoriev Interview; RUDNICHAR, 10 Jan 80)	43
Minister of Transportation Surveys 1979 Achievements (Vasil Tsanov; TRANSPORTEN GLAS, 9 Jan 80)	48
Insufficient Fertilizers, Other Problems Discussed (Goryan Kotev Interview; KOOPERATIVNO SELO, 26 Jan 80).	55

CONTENTS (Continued)	Page
CZECHOSLOVAKIA	
CSSR Economic Plan Fulfillment (RUDE PRAVO, 25 Jan 80)	59
SSR Economic Plan Fulfillment for 1979 Announced (PRAVDA, 26 Jan 80)	74
Sources of Manpower in Sixth Five-Year Plan Discussed (Dyna Tesarova; PRACE A MZDA, No 12-13, 1979)	87
'ZEMEDELSKE NOVINY' Comments 'To Each According to Tangible Results'	
(L. Pelouchova; ZEMEDELSKE NOVINY, 24 Jan 80)	93
Industrial Progress Through Licensing Trading Urged (Petr Spacek; HOSPODARSKE NOVINY, 18 Jan 80)	95
Briefs	
North Moravian Agricultural Seminar Czech Road Traffic Statistics	102 102
New Reservoirs	102
Amelioration Work in Moravia	102
CSSR Official in Ecuador	103
Extraordinary Saturday Shift Application of Soviet Methods	103 103
HUNGARY	
Effects of New Producer Prices on Foreign Trade Noted (Peter Lorincze; KULGAZ DASAG, Jan 80)	104
Central Management, Enterprise Independence Viewed (Otto Lukacs; FIGYELO, 16 Jan 80)	113
Situation of Construction Material Industry Noted (Iren Puspoki; FIGYELO, 16 Jan 80)	118
Energy Conservation at Agricultural Enterprises Noted (Istvan Varga; ENERGIAGAZDALKODAS, Nov 79)	126
POLAND	
Construction Ministry Official Interviewed on Export Potential (Zdzisław Grela Interview; FUNDAMENTY, 16 Dec 79)	132

CONTENTS (Continued)	Page
Prospects for Boosting Crop Production Viewed (Stanislaw Nawrocki; NOWE DROGI, Dec 79)	137
Bonus System Encourages Farmers To Conserve Feed (Renata Leska; SZTANDAR MOLODYCH, 14 Jan 80)	144
ROMANIA	
Bonuses for Increasing Milk Deliveries to State (BULETINUL OFICIAL, 28 Jan 80)	147
Briefs Branch of FRG Bank Branch of French Bank	148 148
YUGOSLAVIA	
FEC Vice President Interviewed on Economy (Zvone Dragan Interview; KOMUNIST, 30 Dec 79)	150

#### CEMA NATIONS SHOWING INTEREST IN WESTERN LICENSES

Duesseldorf HANDELSBLATT in German 24 Dec 79 p 8

[Article by TML, dateline Vienna 22/23 Dec 79: "Western Licenses Are at a Premium in the East Bloc; Economic Cooperation With CEMA"]

[Text] Since the beginning of the 1970's CEMA nations have shown a growing interest in industrial cooperation with the West in order to gain possession of developed technical know-how. This interest was not only made known through a number of official statements but it was confirmed through many contracts of cooperation, some of which were concluded on the government level and some on the enterprise level.

Nevertheless, this cooperation varies from country to country, and, in addition to economic conditions, it also depends in large part on the political course of the respective Eastern government. Hungary, Romania and Poland are showing the most interest in industrial cooperation with the West. In order to promote this cooperation, are they providing their Western partners with opportunities to establish joint-venture enterprises on their own state territories.

Czechoslovakia and the GDR are opposed to this form of East-West cooperation for political reasons. In Bulgaria, where a similar attitude has prevailed to date, there have been some indications of late that the regime is thinking about changing it and, following the example of the three countries mentioned above, looking for a more active economic cooperation with the West. With this in mind, Penko Penkoff, president of Bulgaria's Chamber of Commerce and Industry, stated during the 1979 fall fair in Plovdiv that his country wants to expand its industrial cooperation with Western firms and is considering opportunities for the establishment of joint-venture enterprises with Western partners on Bulgarian territory.

### Bureaucracy Is a Hindrance

After investigating the actual situation move closely, however, the realization comes soon that there is little temptation for Western firms to invest capital and take part in joint-venture enterprises even in those East bloc countries that have been pioneers by voting for closer cooperation with the West. The reason is that there are many restrictions and bureaucratic regulations that do not only limit the share of profit for the Western partner but even the production process is made more complicated. Thus, in Hungary, for instance, only four joint-venture enterprises involving Western capital have been operating to date. Among them is the Central European International Bank, which was established only recently and is scheduled to assume its functions in February 1980. The number of joint East-West enterprises in Romania is somewhat higher. Between 1973 and 1978, eight enterprises of this kind were established.

Although legal prerequisites for the establishment of joint-venture enterprises in Poland, which involve Western capital, have, in principle, been in existence since May 1976, only five rather small enterprises of this kind are operating there. The main reason is the fact that the regime has imposed severe restrictions on Western partners with regard to the export of profits. As a consequence, only 50 percent of the net profit or 9 percent of the invested capital can be converted and exported from Poland.

According to written reports by the Polish economic expert Josef Wilczynski, until 1976 East European countries bought a total of more than 2,400 Western licenses, which provided the Western side with an annual profit of approximately \$300 million. During the same period, they sold to the West 700 of their own licenses at an annual profit of \$40 million. approximately half of it involves Czechoslovakia.

Until the end of 1976, The CEMA nations that bought the largest share of Western licenses, as many as 450 each, were the Soviet Union and Poland. They were followed by Czechoslovakia and Hungary (between 250 and 300) as well as Romania. Bulgaria and the GDR. With regard to the sale of Eastern licenses covering the same period, Czechoslovakia was in the lead (350), followed by the Soviet Union, Hungary and Poland. The FRG is in the lead among those countries which sell licenses to East bloc nations. In 1974, agreements involving license sales accounted for about 40 percent of all economic agreements between West Germany and CEMA. The FRG was followed by Great Britian, the United States, France, Japan, Italy, Sweden, Switzerland, Holland and Belgium. Only partial information is available about the kind of licenses that have been exported and the goods that have been produced in East Europe on this basis. Most of them fall into the following categories: Construction of heavy machinery, the chemical industry, transportation, electric machinery, electronics, the metal industry, construction industry and the production of light machinery.

### Emphasis on Chemical Industry

Just how much importance East bloc nations attach to the purchase of Western licenses is evident from a statement by Svatopluc Potac, president of the Czechoslovak National Bank. In his opinion: "Better utilization of foreign licenses is of eminent importance for the reorganization of Czechoslovakia's industry, particularly in the area of machine building." In recent years, the CSSR imported approximately 60 foreign licenses annually. During the course of last year, as many as 439 foreign licenses had already been imported for production purposes. Most of them were used in the chemical industry. Until the end of 1978, Czechoslovakia sold a total of 252 of its own licenses to foreign countries, including CEMA nations. Of these agreements, 33 were concluded last year, 5 of them with the FRG and 4 with Switzerland.

The guidelines for the current USSR five-year-plan period (1976-1980) read: "The purchase and sale of licenses and other technical documents must be promoted." At the present time, the French Peugeot-Citroen Works and the Volkswagen Works are competing with each other for the procurement of license agreements with the Soviet Union. The Soviets are planning to market a new "Moskvich" model which may be produced on the basis of a license acquired from Citroen. Volkswagen Works made a licensing offer to Moscow as well as to Prague for the production of a "Passat" model and engines to be used for the "Rabbit."

Poland is also very much interested in purchasing Western licenses in order to accelerate the modernization of its industry. Whereas Warsaw acquired only a total of 192 foreign licenses between 1945 and 1970, this number jumped rapidly between 1971 and 1975, reaching 316. An example is the production in Poland of heavy trucks or tractors and agricultural machinery in accordance with a license from the American International Harvester Company secured through a license agreement with the Austrian Steyr-Daimler-Puch Works.

In East-West economic cooperation, there are a number of reasons why the purchase of licenses is advantageous for the Eastern side: First of all, it enables East bloc nations to gain possession of highly developed Western know-how and technology under relatively favorable conditions. It makes it possible for them to accelerate the development of their industry by 7 or 8 years all at once. In addition, opportunities exist that a license sold to one CEMA country can also be used by other member nations of the Eastern economic bloc.

Nevertheless, of late warnings have become more pronounced in East European political circles against too much expansion of imports of Western technology. It is feared that this might make East bloc nations become increasingly dependent on the West.

8991

CSO: 2300

INTERNATIONAL LINER SERVICE OF CEMA STATES IN 1978 REVIEWED

Cdansk TECHNIKA I GOSPODARKA MORSKA in Polish No 11, Nov 79 pp 643-647

[Article by K. Kostov of the Ship Freight Coordination Office, Moscow: "International Line Shipping of European CEMA Countries in 1978"]

[Text] The past year of 1978 was an important stage in the dynamic develo, and of the economy of the socialist community countries. The productive was of the nations of the CEMA states in this year was directed towards fulfilling the socio-economic programs confirmed by congresses of the communist and workers parties and the tasks of the comprehensive program of integration of the economy of the CEMA states. Definite achievements were made this year in the development of social production, increasing its economic effectiveness, accelerating scientific and technological progress, and in raising the material and cultural standard of living of the peoples of the CEMA member states.

An important event in 1978 was the acceptance of significant long-term programs of cooperation between CEMA countries in key fields of material production. Foreign trade plays an increasing role in the development of the national economies of the CEMA countries. Foreign trade turnovers of the CEMA countries increased in 1978 by 9.6 percent compared to the previous year and by 38.1 percent in comparison with 1975. Mutual foreign trade turnovers among CEMA countries in 1978 increased by 12.6 percent in comparison to 1977 and by 44.9 percent in comparison to 1975, while turnovers with developing countries increased respectively by 3.8 percent and \$1.3 percent, and with the developed capitalist countries by 6.1 percent and 24.7 percent.

This review was prepared on the basis of the statistical data of the Conference of Freight and Shipowners Organizations of the CEMA states. It does not include Romania. The article originally appeared in the BIU-LETYN INFORMASYYNIY of the Coordination Bureau for Chartering CEMA Ships, No 8, 1979.

In 1978 shipments of foreign trade cargoes by all branches of transportation in the CEMA countries increased by 3.3 percent in comparison to 197.

The maritime commercial fleet continued to play an important role in the transportation system of the CEMA countries. In 1978 the total number of cargo shipments by the maritime transportation fleet of the CEMA countries increased by 8 percent in comparison to 1977.

Line Fleet of the European CEMA Countries

In 1978 654 ships with a total capacity of 5.2 million tons were employed on the regular international trade lines of the shipping enterprises of the Luropean CEMA countries. In comparison to 1970 the number of ships employed on regular lines increased by 54.2 percent, and their total capacity more than doubled. As a result of renovation and specialization of the line fleet of these countries in 1978, the number of line ships diminished by 4.5 percent, and their total tonnage decreased by 1.4 percent in comparison to 1977 (Table 1).

Among the individual countries Bulgaria and Hungary did not show any changes in the line fleet. They continued to put larger ships into service. In comparison to 1970 the line fleet of Bulgaria increased by 44.8 percent with respect to the number of ships, and by 82.9 percent with respect to capacity, while figures for Germany were respectively 22.5 percent and 72 percent, and for Poland 6.7 percent and 23.7 percent. In 1970-1978 the number of line ships of the USSR increased more or less 2.5 times, and the tonnage of the line fleet more than tripled, while in 1978 the number of line ships and their total tonnage was a little less in comparison with the level of 1977. In 1978 the line fleet of Czechoslovakia was reduced in both number and tonnage in comparison to 1970 and 1977.

In 1978 the line fleet of the European countries of the socialist community, especially Poland and the USSR, was complemented by specialized tonnage (large container ships and "ro-ro" ships).

During the period under examination 99.2 percent of the line tonnage of the CEMA countries was handled by the shipping enterprises of Bulgaria, GDR, Poland and the USSR.

International Freight Lines of the European CEMA Countries

The shipowner enterprises of the European CEMA countries in 1978 maintained 137 regular freight lines in various short and oceanic routes, including 69 lines (147 ships, 487,700 DWT [deadweight tonnage]) on short routes and 68 lines (507 ships, 4,691,000 DWT) on oceanic routes (Table 2).

Table 1. Line Fleets of the European CEMA Countries in 1970, 1977 and 1978

Late [1]	Ogolem (2)	n (2) Bulgaria		Czechoslowacja (3) NRD (4)	(3) N	IND (4		Polska (5)		Wegry (6)	ZSRR (7)
				Llezbi	Liezba statków	(8)					
25	48	RO	0	-2		200		156	500		22
	2	•		Nosnose	Nosnose w tys. ton	(6) uo	_	8			
25	2514,5 8252,4	165,3		\$ 8 0 0		525,8 803,8		854.0	E X		8.078 2954.9
	10.10	1,000 1,000 1,000 0,100 0, 100	Minet noin	ofer flots	do nere	1,906	dunkaw.	056,4	· (10)		2013,0
222	S.H.S.			222		25.5		98.8	8 X X		188
		Udział w	ogólnej	nosności floty liniowej	loty lini	owel p	panstw RWPG %	" Dd	(11)		
255	0.00 0.00 0.00			0 8 6		80,9 17,1 8,71		28.0 6.0 6.4	000		8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00
Ke	Key: 1.	Year			7.	USSR	~				
	2.	Total			φ	Numb	Number of ships	ship	co.		
	3.	Czechoslovakia	kia		9.	Capa	icity i	In 1,	Capacity in 1,000 tons		
	4.	GDR			10.	Shar	e of t	cotal	Share of total fleet capacity for	apacity	for
	5.	Poland				trar	sporti	p gui	transporting dry cargo %	%	
	.9	Hungary			11.	Shar	te of t	total	Share of total line fleet	eet	× 00
						cape	CILLY	111	e CERTA C	מחוורו דב	

In 1970-1978 the total number of international freight lines of the European CEMA countries increased by 48.9 percent, that is by 45 lines (230 ships, 2,664,200 DWT). On short routes the increase was 20 lines (8 ships, 192,200 DWT), and on oceanic routes it was 25 lines (222 ships, 2,472,000 DWT).

In 1978 the number of ships working on oceanic routes increased by 33 units in comparison to 1977, and the tonnage increment came to 199,300 DWT. During this same time the number of ships working in short routes decreased by 64 units in 1978, while the drop in capacity came to 273,000 tons. These changes occurred mainly as a result of very logical use of the tonnage on regular lines, and by complementing the line fleet with larger and specialized ships (container ships and "ro-ro" ships). In 1978 the shipowners of the CEMA countries activated the following new lines:

Poland Ocean Lines [PLO] - 2 lines:

Poland - New Zealand between the ports of Gdynia, Hamburg, Rotterdam, Antwerp, Dunkirk, Rouen, Cristobal, Callao, Oakland and Timaru; Poland - Great Britain (container line) between the ports of Gdynia and Tilbury (one container ship with a capacity of 3,360 tons).

Latvian Shipping Enterprise (USSR) - 1 line:
USSR - Continent between the ports of Riga and Antwerp on ships of the
"Engineer Machulskiy" type. The line specializes in transporting
automobiles.

Azov Shipping Enterprise (USSR) - 2 lines: USSR - Libya between the ports of Bierdiansk and Tripolis, two ships of the "S. Gusiev" type;

USSR - Italy between the ports of Zhdanov, Imperia, Savona and Genoa. This is a line maintained in common with the Italian partner since October 1978.

Parallel to the activation of the new lines, the activity of the following lines was suspended:

International Freight Lines of European CEMA Countries in 1970, 1977 and 1978 Table 2.

\*\* 3

Państwa (1)	Liczba linii	(3)		Liczba statków(3	(3)		Nosnose tys. ton (4)	( <del>4</del> ) uo
1970	1877	1978	1970	11977	1970	1970	1577	1978
DGOLEM (5) #	80	111	727	555	654	2514.5	5252.4	5178,
Lanle bliskie (6) 49	5		iŝ		147	295.5	7.007	181
Unie oceanicane (7) 43	2	2	R	-	203	0.012	4491,7	1691
Bulgaria (8) (4)	=	=	2	4	2	165.2	292,5	302,1
Linie bliskle	•	•	=======================================	=	-	40,4	47.6	1.
Linie oceaniczne (7) 4	•	•	=	2	=	124,4	244.8	234
Czechosłowacja (9)	•	~	-	=	•	75,0	2.3	77
Linie oceanicane		-	-	• •	- 4	0,6		
NRD (TO)		. <del>.</del>	'2	318			803.8	100
Linie bliskle (6) 3	•	•	2	=	-	1.0	25,5	=
-	2	2	3	3	4.	507.1	870,3	885,
Polska (11) 30	10	2	251	381	951	854.0	978.4	1056.
Linie bliskie (D) 17	2	=	R	-	=	43,5	101.3	46.
Linie oceaniczne( / ) 13	=	=	=	2	129	810.5	817.1	1010.
Wegry (12)	•	•	-	-	•	1.3	86,5	2
Linie bliskie	•	•	14	•	•	2.0	26.5	9
Canie occanicane	1:	1 2	1	1 5	1	1	. 7500	2873
Interpolation of the state of t	: 3	2 7	ī	311	2	165	491.5	343.
Inte oceanicane 7 13			=	233	2.40	0 504	2463.4	2530

- Country and range 6.5.4.2. Key:
- Number of lines Number of ships
  - Capacity in 1,000 tons
    - Short lines Total

- Czechoslovakia Oceanic lines Bulgaria
- GDR 7. 8. 9. 10. 11. 12.
- Poland
- Hungary USSR

The Black Sea Shipping Enterprise from the ports of the Black and Mediterranean seas to the ports of Canada and the Great Lakes, and

The Czechoslovak Maritime Navigation from the Baltic ports to the ports of the Persian Gulf and from the ports of the lower Danube to the ports of the eastern coast of the Mediterranean Sea.

In 1978 several lines of Polish and USSR shipping enterprises were reorganized. For example, the port in Copenhagen was added to the ports servicing the Polish container line (Szczecin-Great Britain, London).

The activity of the Polish Australian line was expanded by adding ports in the southern area of the Pacific Ocean to the service ports. The PLO ships on the BALTATRICA line began to service the ports of Madagascar, Mozambique and Mauritius in 1978.

Two lines of the Soviet Estonian Shipping Enterprise (Norway-Denmark and USSR-Sweden) were united into a single USSR-Scandinavian line. In addition a container ship of the "W. Kuczer" type was added to the line.

Furthermore the activity of the Azov Shipping Enterprise on the Black Sea and Red Sea was expanded to the ports of the nations of Eastern Africa, simultaneously suspending the activity of the Black Sea Shipping Enterprise on this route.

In 1978 the shipowner enterprises of the European CEMA countries continued the practise of introducing new shipping technology on their lines, giving consideration to the specific needs of individual freight routes and taking the interests of their clients into consideration. Container ships ships, semicontainer ships and ships of the "ro-ro" type were added to many lines. In 1978 45 container ships with a capacity of 328,400 tons were working on 17 lines of the CEMA countries. In comparison to 1977, when larger container ships (of the "Engineer Machulskiy" type) were put into service on these lines, the number of container ships was reduced by 10 percent. In 1978 6.3 percent of the line tonnage of the CEMA countries was working on these lines.

In 1978 the total number of ferryboats and "ro-ro" ships on 10 lines of the countries of the socialist community amounted to 19 (150,000 DWT). In comparison to 1979 the number of "ro-ro" ships on these lines dropped by 24 percent, but, thanks to putting large "ro-ro" ships into service on the lines of the Baltic Shipping Enterprise (USSR), their total capacity increased by 14 percent.

In this way modern methods of transporting goods were used on 27 lines of the shipping enterprises of the CEMA countries (19.7 percent of the total number of lines) in 1978. A total of 9.8 percent of the line ships of the CEMA countries and 9.2 percent of their capacity was used on them.

Table 3. Container Lines of CEMA Countries in 1977 and 1978

OGGGER (5)  NRD (6)  NRD (6)  NRD (6)  NRD (6)  NRD (7)  NRD (7)  NRD (7)  NRD (8)  NRD (8)  NRD (8)  NRD (8)  NRD (8)  NRD (9)  NRD (8)  NRD (9)		(	3) Liceb	3) Liceba statków 4) Nosność ton	4) Nosing	ose ton
(7) (12) (14) (14) (14) (15) (15) (15) (15) (15) (15) (15) (15	Paristwa, atmetotay, telecje	(1)	1977	1973	1977	1978
(7) (1) (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2)			98	×	420 571	×
(72) (72) (72) (72) (72) (73) (73) (73)	(4)		×	7	×	358 415
(22) (22) (22) (23) (23) (24) (25) (25) (25)	Bryta	Restock, Tubury, Denton Wherf	1	•	7 800	1 560
(22) (22) (22) (23) (24) (25) (25) (25)	Polsks - W. Brytanie, pont	aczecin, Londyn, Kopenhaga (31)	-	-	1 100	1 765
(22) (22) (22) (23) (24) (25) (25)	17077	mington		ı	46 834	1
(17)  (17)  (17)  (17)  (17)  (17)  (18)  (19)  (20)	- Deste	Stonedin, Osto, Kopenhaga	-		1 100	1 355
(17)  199. Zeri(18)  199. Zeri(18)  Bryania (20)  Estra (22)  Tracta Zeriugos (  Tracta Z	als (14	Gdynia, Tilbury	11	• =	1	3 360
(17)  Tyle Zegl((18)  Tyle Zegl((18)  Strank (20)  Stark (22)  Track Zeglugows (  odnic Prock. Zeglu  c - Kontene(27)  your Light Footen  sponk (26)  smile (28)  27)	- Linear	(16)		,•		
Lenings Princis Princis Princis Princis Princis Princis Repair Re	Kontenerowa (17)	Leningrad, Londyn, Hamburg, Rotterdam, Antwerg	In. (33)	•	22 711	22.711
Brytania (20) Hamburge (2) Hamburge (21) Higher (22) Hilczews (22) Hilczews (23) Hilczews (23) Hilczews (24) Hilczews (25) Hilczews (26) Hilcz	•	Leningrad, Hamburg, Brems, Rotterdam, Nowy Jo	, is,	•	76 455	24 094
(22) Ilicaeva (22) Ilicaeva Ilicaeval Refluçove (2) Plant J Segluçove (2) Plant J Canov. Segluçove (2) Plant J Interectify Seglucove (2) Plant J Interectify Seglucove (2) Plant Plant J Interectify Seglucove (2) Plant Pla	19). Zegileber Brytania (20)	Ayge, Rostock, Hamburg (35)		-	1 120	1 120
Tites was the control of the control	ede. Legluge	11 [Crewsk, Odesse, 19herson, Bielgored Dniestrows	13,	,		
odnie Przede, Żeglugowe (2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	•	Warne, Burges (30)	1 (7	-	ii m	6 270
chodnie Przeda. Zeglugowe (2 danow, chodnie Przeda. Zeglugowe (2 danow, chodnie Przeda. Zeglugowe (2 danow) stanowa (2 danow) sechodk Manila (2 danow) Nachodk Manila (2 danow) Nachodk		Beint John, Baltimore, Filadelila		•	40 800	24 000
Pesco Pacific — Kontenegary Seattle, Vancouver, Portland, Long Beach, Oakland, Fesco Pacific — Kontenegary Seattle, Nagola, Hong-Kong, Manila, Bangkok, (40) 19  Transsyberyjaka Linja Kontenerowa (25) Klerunek Japonia (26) Klerunek Hong-Kong (27) Nachodka, Port Wostocznyj, Hong-Kong, Toklo Klerunek Manila (28) Nachodka, Port Wostocznyj, Manila, Toklo	racul. Zegiugowa	Zdanow, Nespol, Livorno, Genua, Barcelona, Pireus Zdanow, Wenecia, Rawenna, Rijeka, Pireus (39)	(38)		13 110	12 200
Transsyberyjska Ligia Rostenerowa (2)  Kierunek Japonia (26)  Kierunek Japonia (26)  Kierunek Mong-Kong (27)  Kierunek Mong-Kong (27)  Kierunek Mong-Kong (28)  Kierunek Manila (28)	Palekowschodnie Przeds. Zeglu Fesco Pacific - Kontenerows	Seattle, Vancouver, Portland, Long Beach, Oakla	19.			•
P P P P P P P P P P P P P P P P P P P		Sing-put.	0)	-	141 908	98 194
Manila (28) Nachodke, Port	Kierunek Japonia (26) Kierunek Japonia (26) Kierunek Hong-Kong (27)	Port	••	<b>,</b>	26 040 18 197	31 914
		Port	-		4 230	11 314

routes	
shipowner,	
Country,	-
1.	(
Key:	

S
-
-
0
P
2
- 4

# Denmark

# Black Sea Shipping Enterprise

Bielgorod	Dnivestrovskiv, Varna
8	>
-	
9	>
-	-
B	~
Il'ichevsk,	VS
S	0
>	1
e	-
드	00
0	e.
	5
_	
=	5
9	

Antwerp 33.

Vladivostok, Japan ports Tokyo, Nagoya, Singapore 40.

Table 4. "Ro-ro" and Ferryboat Lines of CEMA Shipowners in 1977 and 1978

Total 1 11-1- (1) Total 1	iczba	staticow	Nosno	ton
Państwa i linie (1) Porty (2)	1977	1978	1977	1978
OGOLEM (5) 10 lindi 1977 (20) NRD (6) 10 lindi 1978 (21)	25 ×	×	131 523 ×	149 960
Finlandia (7) Rostock, (ro-ro) Helsinki, Kotka	1	1	4 470	4 470
W. Brytania (8) (ro-ro) Rostock—Hull Polska	1	1	4 700	4 700
Polska—Szwecja Świnoujście, (promowa) (9) Ystad Polska—	3	3	4 220	4 535
Finlandia Gdańsk, (promowa) (10) Heisinki ZSRR (11)	1	1	1 700	2 050
Przeds. (12) Zeglugowe ZSRR-wsch. (13) wyb. W. Bry- Leningrad- tanii (ro-ro) LERR - Kon- Leningrad, Ham- tynent, Zato- ka Meksykań- dam, Antwer- (22	1	1	6 129	6 129
ska, "Balt-(14) pla, Houston, (23 Nowy Orlean (23 Leningrad, Hamtynent (ro-ro) burg, Antwer-	) 2	3	12 258	36 881
(15) pia, Rotterdam, Deitzyl (24) Lotewskie Przeds. (16)	13	ė	13 536	23 840
Zeglugowe SRR — zach. (17) wyb. W. Bry- tanli (ro-ro) Ryga, Ellesmers	1	1	6 128	6 128
SRR - Fran- Ryga, Hawr. (25)	1	1	6 128	6 128
cja (ro-ro) Baltmedeast <sup>*</sup> (18) contynent — Hamburg, Rotter- Zatoka Perska dam, porty Zat.	•		4 128	0 128
(ro-ro) (19) Perskiej (26)	:	3	12 256	35 000

Key:	1.	Country and lines	15.	USSR - Continent
	2.	Ports	16.	Latvian Shipping Enterprise
	3.	Number of ships	17.	USSR - western coast of
	4.	Capacity in tons		Great Britain
	5.	Total	18.	USSR - France ("ro-ro")
	6.	GDR		BALTMEDEAST
	7.	GDR - Finland ("ro-ro")	19.	Continent - Persian Gulf
	8.	GDR - Great Britain ("ro-ro")		("ro-ro")
	9.	Poland - Sweden (Ferryboat)	20.	Lines 1977
	10.	Poland - Finland (Ferryboat)	21.	Lines 1978
	11.	USSR	22.	Antwerp
	12.	Baltic Shipping Enterprise	23.	New Orleans
	13.	USSR - eastern coast of	24.	Delfzijl
		Great Britain	25.	Riga - Le Havre, Dunkirk
	14.	USSR - continent, Gulf of Mexico, BALTGULF	26.	Persian Gulf ports

The international freight lines of the Furopean CEMA countries are based in the ports of the northern and southern Far East basins.

In 1978 83 freight lines of the shipping enterprises of the GDR, Poland, USSR and Czechoslovakia, that is, approximately 60.6 percent of all the international lines of the European CEMA countries operated in the northern basin from the ports of the Barents, Baltic and North Sea ports. The number of ships constituted 63 percent of the total line fleet of these countries and 58.3 percent of their capacity.

The greatest shipowners of line tonnage among the shipping enterprises maintaining freight lines in this basin are the shipowners of the GDR (30 percent), Poland (35 percent) and USSR (Murmansk, Baltic, Estonian and Latvian shipping enterprises, 34.6 percent).

In 1978 45 regular lines of the shipping enterprises of Bulgaria, Hungary, USSR and Czechoslovakia, that is, approximately 32.8 percent of all international European lines of the countries of the socialist community, operated in the southern basin, to and from the ports of the Black, Azov, Caspian, Mediterranean and Adriatic seas. The number of ships working there constituted 29.8 percent of the entire line fleet of these countries and 32.3 percent of their capacity.

The most important shipowners of the European line fleet of the CEMA countries in the southern basin are the shipowners of Bulgaria (18.1 percent) and the USSR (the Black Sea, Azov and Danube shipping enterprises, 79.6 percent).

In comparison to 1977 the number of short and maritime lines maintained by Bulgaria and Hungary did not change. The number of ships working on these lines was also maintained at the previous level.

In 1978 the Soviet shipowners suspended one line in the southern basin. The number of ships working on these lines was reduced by 16 and their capacity by 123,100 tons.

In 1978 47 ships with a total capacity of 488,400 tons were working on 9 lines of the Far East Shipping Enterprise (USSR). In comparison to 1977 the number of Soviet ships operating in the Far East basin was reduced by 2.1 percent and their capacity by 1.4 percent (6,900 tons).

Cargo Shipments of the Line Fleet of the European CEMA Countries

In 1978 the total line shipments of the European CEMA countries came to 22.2 million tons, that is, they increased by 38.7 percent in comparison to 1970 as a result of the increase in shipments by Bulgarian shipowners (by 7 percent), Polish shipowners (by 13.8 percent) and USSR shipowners (by 84.9 percent). Shipment with the line tonnage of the GDR and Czechoslovakia diminished slightly, while that of Hungary increased slightly.

Table 5. Shipments on Regular and Short Oceanic Lines of CEMA Countries in 1970, 1977 and 1978 (in 1,000 tons)

TABL & PRZEWOZY NA BLISKICH I OCEANICZNYCH LINIACH REGULARNYCH PANSTW RWPG W LATACH 1970, 1977 1 1978 (W TYS. TON)

(1)	L	inie blis	kie (2)	Li	nie ocean	iczne (3
Państwo -	1979	1977	1978	1970	1977	1978
OGÓLEM (4)	5624,6	7894,2	6585,2	10 493,1	14 130,8	25 612,8
Bulgaria	852.2	708,1	T23.0	487,2	685,7	694,4
Czechosło-(5)	11,4	41,4	69,5	171,0	197,0	19,0
NRD (6)	332,7	936,9	400,3	2 390,3	1 425,3	2 049,6
Polska . (/)	\$20,3	1662,0	1296,3	3 123,2	2 664,0	3 315,0
Wegry (8)	223,8 3123,8	155,3 4370,5	226,8 3883,3	4 121,4	9 165,8	9 545,8

Key: 1.

- 1. Country
- Short lines
- 3. Oceanic lines
- 4. Total
- 5. Czechoslovakia

- 6. GDR
- 7. Poland
- 8. Hungary
- 9. USSR

In 1970-1978 cargo shipments increased by 20.5 percent on the regular international lines of the European countries of the socialist community on short routes, while they increased by 48.8 percent on maritime routes.

In comparison to 1977 total shipments increased slightly (by 165,000 tons), mainly because of the increase in shipments by Bulgarian (2.8 percent), Hungarian (46 percent), GDR (2.8 percent) and Polish (6.4 percent) tonnage. This period noted a drop in total line shipments in USSR and Czechoslovakia.

In comparison to 1977 the range of cargo shipments on maritime routes increased by 10.4 percent because of the increase in shipments by Bulgarian, Polish and Soviet shipowners, and diminished by 16.6 percent on short routes because of a drop in the shipments by the GDR, USSR and Czechoslovak shipowners.

Cooperation of Shipping Enterprises of European CEMA Countries in Line Navigation

During the last year international line navigation of the European countries of the socialist community continued to increase, both by way of activation of independent freight lines and as a result of reorganizing existing lines and intensifying and expanding the cooperation of the navigation enterprises of these countries on lines already operated jointly.

Joint Lines of CEMA Countries and Shipments on These Lines in 1977 and 1978 Table 6.

(1)	Przedsiębiorstwa	teglugowe ( 2)	3) Licebe	tatków /	, Nosnose	Liceda statków 4) Nosnosć w tys. tor 5) Przewozy w tys. ton	Przewozy (	w tys. ton
	wzpółpracujące	na linis (2)	1977	1978	Tre!	1978	TAI	1978
(6) METODO	1977 - 9 lindi (10)	•	ž,	×	1164,6 X	×	6,998.8 ×	×E
Bulgaria-25RR	Bulgaraka Flota Morska, Przeds. Zeglugowe	3	(11)	•	7.6	47,4	17.73	0,530
("Bulcube") (8	Navigacion Mambica	Empress de	12)		9'98	6,08	9'08	0'88
(6)	Prieda Zeglugowe	a la	653	-	3	5.	180,8	1,581
"Beltafrica"	Priedt. Zeglugowe Deutfracht Scereederel,	PLO. Estonarie	15)	22	134.0	169.1	9,00	45.65
Beltemerica	Przeds. Zeglugowe	o de la constante	16) 11	=	1881	155,3	8,000	935,0
Cubalco	Ceskoslovenska Namor	27	17). 10	•	116,0	. 8	141,0	131,3
Polarette"	Estodskie Przeds. Zeg. PLO, Murmańskie Przed	ugowe s. Zeglugowe	18) 78	£ R		25	1380.1	111.0 H.1.1.

· Brak danych Empresa de Navigacion Mambisa. • Brak danych PZM i Empresa de Navigacion Mambisa. • DSM współpracuje w tej relacji także z armatorami krajów rozwijających się, diatego dane tej linii są umownie podzielone.

Lack of data on Mambisa Navigation Enterprise Footnote:

Lack of data on PZM [Polish Steamship Company] and Mambisa Navigation Enterprise

DSR [German Freight Shipping Company] also cooperates countries, and therefore is divided by convention. on this route with shipowners from the developing

Shipping enterprise coopera-Key:

ting on the lines

Capacity in 1,000 tons Number of ships

Shipments in 1,000 tons

Total

Bulgaría - USSR<sub>1</sub> Bulgaría - Cuba<sup>1</sup> (BULCUBA)

GDR - USSR

Lines

Black Sea Shipping Enterprise Bulgarian maritime fleet, Bulgarian maritime fleet,

Mambisa Navigation Enterprise Company, Latvian Shipping German Freight Shipping

Shipping Lines], Estonian PLO [Polish German Freight Shipping Company, 14.

German Freight Shipping Company, PLO 15.

German Freight Shipping Company, PLO, Baltic Shipping Enterprise 16.

Bulgarian maritime fleet, DSR, DSR Mambisa Navigation Enterprise, PZM, Czechoslovak Maritime Navigation 17. 18.

PLO, Murmensk Shipping PLO, Estonian Shipping Enterprise Enterprise 19.

Countries and Shipments on Ships of CEMA Countries on These Lines Joint Lines of CEMA Shipowners With Shipowners of the Developing 1977 and 1978 Table 7.

111	7	cabe	Licabe linii (2)	(7)	Leabs	Licaba statków (3)	(3)	Notnoté tys. ton (4)	tys.	ton	Przewozy tys. ton (5)	tys.	ton	3
Panatwa (1)	Tate		1878		1187	1976		1977		E	15TT		1976	
OGOLEM (6). Bulgeria NRD' Polska (8) (7) VKET7 ZENN (10)		,			E19**2	1111		E3.4 186.3 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5		F 1 2 8 8	1386, 410,0 146,0 14,6		5 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

' W relacii Kontynent-Lewant DSR wepolpracuje takte z uczestnikami "Unilevant", diatego dane zostały umownie podzielone.

On the Continent-Near East route the DSE also cooperates with UNILEVANT participants, and therefore the data have been divided by convention. Footnote: 1.

Total	GDR1	8. Poland	Hungary	USSR
9	7.	00	9.	10.
Country	Number of lines	Number of ships	Capacity in 1,000 tons	Shipments in 1,000 tons
		3.		
Key:				

Joint Lines of CEMA Countries With Shipowners of the Developed Capitalist Countries and Shipments on Ships of CEMA Countries on These Lines in 1977 and 1978 Table 8.

(1)	Lierbe	unu (2)	Liente	stateow (3)	) Notnote tys. ton (	tys. ton	(4)	Przewory tys.	131. ten(5)
T) manual	1841	181	E	E	181	197		1977	1978
(6) min	2.	*	2.	2.	23			1,186	1,007,5
(8)	•	-	•	•	12			2	2
ESH (7) (10)	1-	- 2	12	-2	13			1433	1302.3

Total	GDR	Poland	Hungary	USSR
.9	7.	80	6	10.
Country	Number of lines	Number of ships	Capacity in 1,000 tons	Shipments in 1,000 tons
1.	2.	3	4.	'n
Key:				

Regular Lines of Shipowners of CEMA Countries Cooperating With Line Conferences and Shipments on Ships of CEMA Countries on These Lines in 1970, 1977 and 1978 Table 9.

			100	lote liniows	(7)					Z.	Priewoffy	3)		
L) Pedatus	1970		Ŋ	E			E				THE		101	
*		C	4		o	4	-	U	tys. ton	*	tys. ton	**	tys. ton 4)	*()
de= (5) se		7	=		1999.6	=	ā	2000	1626.7	11.0	2,1000	11,1	6,3,6	ä
(9) and	1-	12		- 2			- 7	7	1	12	97	7.0	1620.5	28
ZERR 8)	AR	18	••	22	33	٠-		15	11	23		25	11 18.0	

A - Number of Lines, B - Number of ships, C - Capacity in \* Share in total line shipments of individual countries 1,000 tons. Footnote:

Poland Total USSR COR 1,000 tons Line fleet Shipments Country Key:

The share of the line fleet of the European CEMA countries servicing joint lines in 1978 was characterized by the following numbers: 259 ships or 39.6 percent of the line fleet of the countries of the community were working on 32 lines. The capacity of these ships amounted to 1,728,200 tons or 33.4 percent of the total tonnage.

In 1978 ships of the CEMA countries transported 7,600,600 tons of cargo (34.2 percent of all line shipments) on these lines.

In comparison to 1977 the line fleet of the European CEMA countries on joint lines increased by 3.1 percent with regard to capacity, and shipments increased by 184,700 tons (4 percent).

The practice of holding conferences among the shipowners of the CEMA countries on the possibility of cooperation on concurrent routes was continued. In the middle of November 1978 a new ferryboat line was activated between the ports of Varna and Il'ichevsk as a result of the joint efforts of the shipping enterprises of Bulgaria and the USSR.

As Table 7 shows, despite the reduction in the line fleet of the CEMA countries in service on lines maintained jointly with the shipowners of the developing countries (a reduction in the number of ships by 19.4 percent and in capacity by 31.7 percent), freight shipments on ships of the CEMA countries increased by 1.5 percent in 1978.

In 1978, in comparison to 1977, 23 ships of shipping enterprises of the countries of the socialist community were in service on 14 joint lines maintained by shipowners of the CEMA countries with partners from capitalist countries, with a total capacity of 100,700 tons, which means a little increase in tonnage. Shipments by ships of the shipping enterprises of the CEMA countries on these lines dropped by 11.3 percent in comparison to 1977.

Cooperation of Shipowners of the European CEMA Countries with Line Conferences

In 1978 there was a further expansion in the contacts between shipping enterprises of the European countries of the socialist community and line conferences.

In 1978 shipowners from Bulgaria, GDR, Poland and USSR cooperated with line conferences on 25 regular lines, that is, the number of lines increased 2.5 times in comparison to 1970. In the course of the last 8 years the number of ships servicing these lines increased approximately 3.5 times, and their capacity and shipmerts almost tripled. In comparison to 1977 the number of ships dropped by 16 percent and their capacity by 40,300 tons, while line shipments increased by 422,100 tons during the same period.

The international line navigation of the European CEMA countries continued to develop successfully under conditions of bilateral and multilateral cooperation among the shipping enterprises of these countries. In 1978 there were a number of conferences and consultations among shipowners of the CEMA countries for the purpose of finding new ways and forms of cooperation for more effective exploitation of their line ships. As a result of them work was carried out with the intention of creating a single network of agency and stevedore service for the ships of the joint lines in the ports of the Continent (Hamburg, Rotterdam and Antwerp) and, since the end of 1978, the ships of these lines have been serviced for all practical purposes in these same terminals.

Activity aimed at further optimizing the activity of the regular lines of the CEMA countries is still continuing.

6806

CSO: 2600

### PROGRESS IN POWER PLANT CONSTRUCTION HAILED

Tirana ZERI I POPULLIT in Albanian 25 Dec 79 p 3

[Article by Emin Musliu, director of the Institute for Technological Studies in Construction in Tirana: "Power Plants--The Pride of Our Industry"]

[Text] As in all fields of our country's socialist industrialization, grand successes have been achieved in the field of power plant construction during the years of the people's authority. The power projects—hydroelectric and thermoelectric power plants, the single electric system and lines, substations, etc.—are the pride of our industry and our economy.

Nothing was handed down in this field, no high-level cadres, technicians or specialists. Everything had to start from the beginning. Thus, the Albania of pine and candle was transformed, through its own efforts, into a country which plans and constructs power plants of world class, such as the hydroelectric power plants at Vau i Dejes, Fierze and Komani, which together will have 1.35 million kilowatts of power and will produce about 4.8 billion kilowatt hours of electricity annually. Energy production this year is expected to reach 2.8 billion kilowatt hours, or about 1,080 kilowatt hours per person.

In order to achieve this, great difficulties and numerous obstacles had to be overcome in the field of power plant research, planning and construction. Our builders, determinedly implementing the great principle of relying on our own efforts, successfully resolved all the problems in this field and, at the same time, issued the deserved reply to both the Soviet and the Chinese social imperialists who desired that such power plants not be constructed in Albania. By virtue of the direct attention of the AWP Central Committee and the government, the Hydroelectric Planning Institute, high tension lines and substations, the geologic and topographic enterprise, the hydraulic modeling laboratory, the hydroelectric plant constructionenterprise, the high tension line and substation construction enterprise, the industrial installations enterprise, etc., were established and

strengthened with cadres, specialists and equipment. We now have a powerful base which, by our own efforts, puts us in a position to resolve all of the tasks which arise for power plant construction and for the continued and higher level development of the electric power industry.

Besides the work and efforts to overcome the difficulties of growth, the planners and builders of hydroelectric power plants, in order to study and resolve the many scientific and technical problems which faced them, had to make a determined effort to counter the attitudes of Soviet and Chinese revisionist specialists who tried in every way to obstruct the construction of power plants in Albania.

The Soviet revisionist specialists who had come to plan and construct the "F. Engels" and "J. V. Stalin" power plants, upon their departure from Albania, declared that these projects would remain unfinished. Life confirmed that our workers, specialists and cadres resolved all the problems very well and that the projects were successfully completed. Not only that, upon the departure of the Soviet specialists, at the request of the AWP Central Committee and the government, our people courageously undertook high-level scientific studies for the exploitation of the Drin River, going from medium to large scale power plants and, at the same time, started work on the construction of the Vau i Dejes power plant and later the Fierze power plant. Both of these huge power plants, from the standpoint of rated power and energy production and especially of research, planning and construction problems, are of world class and were planned and constructed by our own efforts. This was a dazzling victory of the party line, the special attention of the Central Committee and the government and the determined revolutionary attitude of our amazing cadres, specialists and workers. The Chinese revisionist specialists, both at the Vau i Dejes and at the Fierze power plants, tried every way to block the construction of these two huge projects. They said that it was impossible to construct the Vau i Dejes hydroelectric plant since the zone where construction of this plant was planned is karstic and water would seep out, since the gravel layer in the river bed is extensive and there is a danger of the water filtering out, that it could not be constructed in the projected time frame, etc. Whereas for the Fierze power plant, they expressed all sorts of doubts about the zone where the plant is being constructed, saying that "numerous studies" were needed, that the Drin River could not be diverted at the scheduled time, that we could not provide the necessary construction facilities and machinery, etc. However, our power plant workers, specialists and cadres gave the deserved response to the Chinese revisionists and made it possible for these two hydroelectric plants to be constructed and placed in operation successfully. Hundreds of planning and construction cadres and specialists and thousands of workers have made their contribution in this difficult but glorious struggle.

For a rough idea of what the construction done in this field represents, here are a few indications. During the past 35 years, the hydroelectric power plants which have been planned and constructed, are distinguished by

their variety and by the large volume of work performed. Approximately 22 kilometers of tunnel were dug and concreted, with the area that was excavated ranging from five square meters at the "Lenin" Hydroelectric Plant to 180 square meters at the Light of the Party Power Plant at Fierze. Large objects have been constructed to discharge the river flow, on the surface and underground, with a discharge capacity of 2,500 to 7,000 cubic meters of water per second and water speed up to 35 meters per second. Tall concrete towers were constructed to direct water to the turbines and to the entrance of discharge channels, up to heights of 80 to 100 meters, as at Fierze. Underground concrete work was done in various geological formations at depths beyond 100 meters and a concrete wall was constructed under the river bed at a depth of 50 meters at the Vau i Dejes power plant, a rare occurrence in world construction practice. Plant buildings over 50 meters in height have been erected and much machinery and equipment has been installed by means of bridge cranes with a 500-ton lifting capacity. Metal tubing 5.5 meters in diameter at Vau i Dejes and 7.2 meters in diameter at Fierze for directing water to turbines have been manufactured locally and installed. Dams have been constructed using local materials and concrete on different geological bases, such as the 17-meter dam constructed using local materials at Bistrice, the 64-meter dam constructed with gravity concrete at Ulze, the 60-meter dam built at Vau i Dejes and the 167-meter dam at Fierze, both using local materials. When completed next year, the Fierze dam will be the highest dam of its type in Europe. An extremely large amount of work has been done on these projects. Suffice it to mention that for the construction of the Vau i Dejes power plant and the Light of the Party Plant at Fierze, over 1.6 million cubic meters of concrete and reinforced concrete were poured, over 13 million cubic meters of fill materials were emplaced at the dams, more than 7.6 million cubic meters of surface and underground excavation were accomplished and over 110,000 milliliters of drilling and cementing were done.

Thousands of kilometers of high tension lines of 35, 110, 150 and 220 kilovolts, which extend over some very rugged terrain, and 86 substations with a variety of power and tension have been constructed for the distribution of electricity. Numerous measures have been taken to accomplish these tasks, both to train and qualify cadres and to mechanize work procedures, securing powerful equipment and machinery which have an overall capacity of about 100,000 horsepower.

In today's situation, when the revisionist encirclement and blockade are having a strong effect on our country, when the energy crisis is worsening and the cost of electricity is steadily rising, the planners and builders of these plants are facing their most critical tasks for the further intensification of the technical and scientific revolution. Therefore, more study and more work are required, greater efforts are required to study, assimilate and implement advanced methods in planning and building, in calculating construction, in modeling and in more boldly adapting the state of the art in science and advanced technology. As in all other fields, many reserves exist in this field and we should exploit them better and more quickly so that projects will be more economical and built in as short a timeframe as possible.

Comrade Enver Hoxha has said: "The construction of hydroelectric plants has reached the point where it not only has created the necessary energy base but has highly qualified our workers, technicians and engineers, who are fully in a position to construct mighty power plants which are being planned for construction by our own efforts. Our state will continue this work in the future, with the goal of increasing electrical energy and thus to exploit all of the country's potential hydroelectric power." This is the grand balance in the energy field with which Albania is entering the 1980's.

The party has opened limitless horizons to the planners and builders of hydroelectric plants. Fresh battles await them for the planning and construction of the Komani and Bushati power plants. To the series of power plants on the Drin River will be added those on the Vjosa River, which is our country's second river in terms of hydroelectric potential. Our country's water resources are very great. Only 15 percent of their potential has been used up to now. Therefore, for the future, our party has assigned us the task of carefully studying the fullest use of these resources in order to make Albania torever rich in energy.

5658

CSO: 2100

### FULFILLMENT OF 1979 ECONOMIC PLAN REPORTED

Sofia RABOTNICHESKO DELO in Bulgarian 23 Jan 80 pp 1-2

[Announcement of the Committee for the Unified Social Information system of the Council of Ministers on the Pulfillment of the Unified Plan for the Socioeconomic Development of the Bulgarian People's Republic in 1979 (BTA)]

[Text] The year 1979 was a period of accelerated building of socialism and of the nationwide competition in honor of the 35th anniversary of the victory of the socialist revolution in the Bulgarian People's Republic. The working people entered the final year of the Seventh Five-Year Plan with optimism and legitimate pride in the successes achieved in the implementation of the strategic line of the Bulgarian Communist Party for high effectiveness and quality.

In 1979 our national economy continued to develop at a stable pace. Compared with 1978 the lational income rose 6.5 percent. The higher social labor productivity accounted for virtually the entire growth of the national income. The more extensive work done for additionally lowering material outlays and saving raw and other materials, in accordance with the decisions of the National Party Conference, made a considerable contribution to the high growth rate of the national income.

In 1979 capital investments totaling about 6 billion leva were made in the national economy. Most of that was used for the further expansion and improvement of the material and technical base of public production. Investments in modernizing, reconstruction, and expansion of productive capacities totaled 3 billion leva or 67.4 percent of the total capital investments in material production, instead of 67.0 percent as planned.

The science and technical progress continued to develop dynamically. Twenty-four new and improved raw and other materials, 488 designs for automated systems, 408 new and improved plant strains, and 1,412 new and improved technological systems were utilized.

### I. Industry

As the result of the good organization of the work of most units and economic organizations, in 1979 the production of important commodities was increased considerably. The industrial structure continued its improvement and material, financial, and manpower resources were utilized more fully. The annual plan for industrial output was fulfilled 100.9 percent.

In 1979 a number of industrial sectors continued to develop at a high pace-the machine building and metal processing industry (7.9 percent); the chemical industry (8.9 percent); the fuel industry (8.4 percent); the food industry (6.5 percent); and the production of construction materials (5.2 percent). On this basis, in 1979 industry was better able to satisfy the needs of the national economy for important raw and other materials and export goods, and the need for goods for the domestic market.

		Goods pro- duced in 1979	Annual plan fulfillment	1979 in % of 1978
Electric power	Million kw.	32,475	100.4	103.2
Cast iron for processing	Thousand tons	1,450	99.9	97.4
Sceel in ingots	**	2, 389	104.4	100.6
Rolled ferrous metals	**	3,056	102.3	102.5
Chemical Fertilizers	99	959	97.9	99.1
Calcinated soda	**	1,498	103.3	115.7
Sulfuric acid	*1 **	998	100.9	102.4
Lathes	Pieces	7,634	101.4	117.7
Electric hoists	**	119,095	100.1	107.8
Gas operated lift trucks	**	21,314	95.4	99.1
Forklift trucks	99	61,239	117.4	141.0
Electric motors	Thousand pieces	1,118	92.9	96.5
Cement	" tons	5,401	100.0	104.9
Round and cut lumber	" cubic meter:	3,410	99.2	99.0
Pressed wood tiles	11 11	294	97.1	110.0
Paper	Thousand tons	313	99.8	106.5
Cotton fabrics	Million meters	344	101.4	98.8
Woolen fabrics	**	35	103.6	106.7
Knitted wear	" pieces	108	99.7	103.3
Shoes	Thousand pairs	19,883	100.5	95.3
Sterilized canned vegetab	les " tons	264	97.0	100.7
Meat	Tons	476,236	97.1	104.3
Butters	**	20,864	101.6	106.2
Kashkaval cheese	**	23,521	100.1	113.9
Cheese	**	96,819	100.7	114.4

The nonfulfillment of the plan for the production of some goods important for the national economy hindered the rhythmical supplying of a number of economic units with raw materials and materials. This adversely affected their economic results. Some economic organizations of the ministries of

machine building, electronics and electrical engineering, and chemical industry, the National Agroindistrial Union, and others did not always observe their contractual obligations for deliveries of raw and other materials and export goods.

The pace of the output and labor productivity of some economic complexes and ministries was as follows:

	1979 in perce	ent of 1978
Ministries and Departments	Marketed goods	Labor productivity computed on the basis of overall industrial output
Ministry of Power Supply	107.0	103.9
Ministry of Chemical Industry	108.9	105.0
Ministry of Machine Building	106.4	105.7
Ministry of Electronics and		
Electrical Engineering	109.1	107.6
Ministry of Light Industry	105.8	104.3
National Agroindustrial Union	104.8	104.1
Ministry of Construction and		
Construction Materials	107.6	102.8
Ministry of Metallurgy and		
Mineral Resources	103.7	101.0
National Transportation Complex	107.9	106.9
Ministry of Forests and Forest		
Industry	102.0	103.7

The plan for the lowering of material and other expenditures was ful-filled. In the course of the year the effectiveness of industrial output rose as a result of the conservation of raw materials, materials, fuel, and energy, and higher labor productivity.

### II. Agriculture

In accordance with the decisions of the March 1979 BCP Central Committee Plenum, comprehensive measures were carried out to increase further agricultural output, strengthen the agroindustrial complexes, and apply the new economic mechanism. The material and technical base of agriculture was broadened.

As a result of the measures implemented for the self-satisfaction of settlement systems with basic food products, agricultural production in the auxiliary farms of nonagricultural organizations and branches and the private farms of the population rose.

Compared with 1978 grain production rose by nearly 800,000 tons or 10.1 percent. Corn production alone rose by about one million tons. The average yields exceeded 480 kg which is a record level for this crop.

The production of barley, rice, soybeans, sunflower seed, tobacco, sugar beets, potatoes, hay, and other feed crops increased.

The 1979 successes became a good base for increased purchases of crop-growing products. Compared with 1978 the following additional amounts were purchaed: bread and feed grain, 546,800 tons; sunflower seed, 64,400 tons; soybeans, 33,700 tons; sugar beets, 438,700 tons; peppers, 26,200 tons, and so on.

Crop growing was adversely influenced by a number of factors. The drought in the autumn of 1978 and the very hot weather in the ripening period affected the production of wheat and barley. Frosts in the spring substantially affected the development of a number of vegetable crops and vineyards. Considerable losses were experienced in harvesting the crop as the result of the lengthy torrential rains in a number of parts of the country, particularly in Northern Bulgaria.

As a result of the increased production of feed crops and the better organization of labor, the further increase in the number of farm animals in the country rose.

The number of basic livestock breeds rose as follows: cattle, 1.4 percent; hogs, 1.6 percent; sheep, 4.3 percent; and poultry, 1.8 percent. Considerable successes were achieved in raising livestock productivity. The average milking per cow by agricultural organizations rose 8.1 percent compared with 1978.

The intensification of animal husbandry by the agricultural organizations and their branches was the basis for the increased production of livestock products in 1979. Compared with 1978 the following additional amounts were purchased: milk (with 3.6 percent fat content), 154.2 million liters; eggs, 128,200.

As a result of the implemented measures the forested areas were expanded and improved. Trees were planted on 400,000 decares, 280,000 of which in coniferous species. Measures aimed at improving the raising of forestry crops were implemented on an area of 1,775,000 decares.

### III. Construction

The construction and installation organizations carried out construction projects worth 2 billion 482 million leva or 97.8 percent of their annual plan and 3.5 percent more than in 1978.

During the year new productive capital worth 4 billion 707 million leva was completed and commissioned.

The following projects were completed: production facility for ethylene and acetaldehyde of the Neftokhim Economic Chemical Combine in Burgas and for the production of polyvinyl chloride in Devnya; the sugar refinery in Kameno, Burgas Okrug; the cast iron plant in Ikhtiman; the kiselgur ore and installation in Ignatievo; the second stage of the Lyulin Heat Plant in Sofia; the Belmeken-Sestrimo Power System; the Bobov Dol-Obedinen Mine; the fourth and fifth electric filters of the Zlatna Panega Cement Plant; the first stage of the plant for porcelain tiles in Isperikh; the plant for construction glass in Elena; the electrification of the Sofia-Mezdra railway track; the Sofia-Mirovo section of the Trakiya Highway. Installations for the irrigation of yet another 146,000 decares of arable land and other industrial and cultural-consumer projects were completed.

The deadlines for the completion of some projects were violated and the fulfillment of the annual plan for the commissioning of productive capital was fulfilled 83.8 percent.

The construction and installation organizations completed housing construction worth 459 million leva or 8.1 percent more than in 1978.

#### IV. Environmental Protection

During the year activities were intensified to implement environmental protection measures. A total of 172 million leva of the funds stipulated in the annual plan were used, 116 million of which in capital investments. With the nonplan projects completed in 1979, a total of 228 million leva were spent. Compared with 1978 an additional 54 million leva were used for such purposes.

One hundred forty-nine new antiair, water, and soil pollution systems were installed.

Activities related to the efficient and comprehensive utilization of water resources were improved. Seventeen enterprises installed water recycling systems thus saving over 30 million cubic meters of water per year.

A number of measures were implemented for the preservation and rebuilding of soils and expanding protected natural sites. Over 39,000 decares of arable land were restored through recultivation, draining, and other measures.

Some construction organizations and investors are still underestimating the importance of installing treatment facilities, particularly urban treatment stations, as the result of which not all funds for capital investments appropriated for 1979 were used.

## V. Transportation and Communications

The public use transportation organizations fulfilled their 1979 plans.

Public use transportation met its quota for income from operational activities 101.4 percent. Compared with 1978 income rose 3.9 percent.

The plan for social labor productivity for 1979 was fulfilled 101.6 percent in rail transports, 101.7 percent in domestic truck haulage, 114.2 percent in maritime transportation, 115.6 percent in riverine transportation, and 119.4 percent in air transportation.

Compared with 1978 the volumes of freight hauled rose 3.3 percent by rail and 5.5 percent by water.

Some basic technical and economic indicators of utilization of transport facilities improved: The average gross weight per freight train rose 3.7 percent compared with 1978; the use of freight car runs was improved by 0.2 percent and that of trucks, by 1.1 percent, compared with 1978. The share of freight hauled through diesel and electric traction rose 1.6 percent. However, compared with 1978, 1979 freight car turnover was slower.

The plan for revenue from communications services was fulfilled 102.8 percent. Income earned was 10.1 percent higher than in 1978.

Labor productivity in communications was 10.2 percent higher than in 1978.

The postal network was expanded by another 30 post telegraph and telephone stations, 11 of which in the villages. Another 103,9394 telephone sets were installed, of which 70,113 in homes. Another 424 Telex sets were installed. Twenty-six radio relay centers, 49 television translators, and four television stations were commissioned.

#### VI. Foreign Economic Relations

In 1979 foreign trade totaled 15 billion foreign currency leva and was 11.4 percent above the 1978 level.

Bulgaria's expanded and intensified participation in socialist economic integration continued. Most of the trade was with the CEMA-member countries, the Soviet Union above all. Exports to nonsocialist countries rose. Our trade and economic cooperation with the developing countries progressed.

As a result of increased economic possibilities, Bulgaria is trading with 112 countries throughout the world.

Income from international tourism, transportation, and other foreign economic activities continued to rise.

During the year our country was visited by over five million foreigners from 155 countries. Compared with 1978 their number was 5.2 percent higher.

## VII. Population Living Standard

As a result of the successes achieved in the economic development of the Bulgarian People's Republic, the material prosperity continued to improve and the spiritual standards of the people continued to rise in 1979 as well. Ever better conditions for the comprehensive development of the individual and the further establishment of the socialist way of life are being created on a comprehensive basis.

The measures taken by the BCP Central Committee and Bulgarian Council of Ministers to raise wages and other income of the working people and make wholesale and retail prices consistent with the objective conditions for the development of the economy and for upgrading its effectiveness, mark a new step in following the course traced by the Bulgarian Communist Party for the further enhancement of the people's living standard. As of 1 November 1979 over four million people obtained considerable social gains. Wages were raised in all sectors and activities. The wages of young and low paid workers and specialists, and working people employed in a number of sectors and production facilities rose quite substantially.

Real population income rose about two percent. Social consumption funds reached 4.5 billion leva. Their social effectiveness improved. More funds were spent on the further development of education, health care, social insurance, and recreation for the working people. As of 1 November 1979 pensions, scholarships, monthly supplements for children, aid for caring for small children, and others were raised. The state budget assumed the higher costs of maintaining secondary and university students' and office cafeterias and absorbed in full the increased cost of food in children's and hospital institutions. Broader possibilities were created for lowering the price of food in workers' cafeterias along the line of the social funds.

On the basis of the higher population income and increased production and imports of consumer goods, the retail trade plan was fulfilled 102.6 percent.

In 1979, as the result of the nonfulfillment of contracts by suppliers, the increased population requirements for eggs, fresh fruits, vegetables, construction materials, and others, were not fully met. Compared with 1978 industrial population services—clothes making, dry cleaning and washing, repairs and maintenance of radio and television sets, household electrical equipment, and others, rose.

Sales of some basic and comestible goods

batta of some basic and	good and a second	1979 Sales	1979 in percent of 1978
Meat and meat products	Tons	280,211	100.6
Fish and fish products	99	35,397	97.6
Milk	Thousand liters	439,453	102.3
Cheese	Tons	62,846	101.3
Kashkaval cheese	**	16,345	110.1
Vegetable Cooking Oils	**	95,528	101.9
Butter	99	14,551	107.6
Sug~r	99	168,174	96.6
Clothing	Thousand leva	497,203	106.2
Knitted goods	" pieces	93,592	101.3
Shoes	" pairs	16,896	104.9
Furniture	" leva	305,602	109.7

Comprehensive socioeconomic measures continued to be implemented in the field of health care. The number of hospital and sanatorium beds rose from 95,700 in 1978 to 97,400 in 1979. The rights to free medicines in the treatment at home of children under three and of pregnant women, granted as of 1 June 1979, was yet another manifestation of society's concern in the field of health care.

The implementation of the program for the development of education, in accordance with the requirements and needs of building a mature socialist society, adopted by the July 1979 BCP Central Committee Plenum, was undertaken. During the year over 99,000 young men and women graduated from secondary schools. Over 17,000 young specialists completed their higher education, of whom over 7,000 in the engineering-technical areas. At the beginning of the 1979-1980 school year there were over 1 million 450,000 students. An average of 164 people per thousand are involved in studies and there are 99 university students per 10,000 population.

The network of children's institutions was expanded. New kindergartens for 11,037 were built and commissioned. Over 416,000 children between the ages of 3 and 6 are attending the year-round and seasonal kindergartens. Places in permanent nurseries and mother-and-child homes rose from 79,600 to about 80,800. Openings in social care institutions rose by about 950 and 438 clubs for the retired were opened.

Unquestionable successes were achieved in the field of culture. The ideological and esthetic level continued to rise in the work of the culture institutes, aimed at molding comprehensively developed individuals.

The successes achieved in 1979 confirm the accurate economic and social policy pursued by the BCP. They represent a new step forward in building a developed socialist society in the Bulgarian People's Republic.

The further expansion and consolidation of successes and the implementation of the tasks included in the plan for the socioeconomic development for the Bulgarian People's Republic in 1980 and 1981 face all working people with even stricter requirements. On the basis of the systematic application of the economic approach, the task now is to rapidly master and utilize scientific and technical achievements, attain a comprehensive intellectualization of material production and other areas of the national economy, and the mass application of leading experience as a basis for the development, with new strength, of the socialist competition and the even further improvement of the socialist organization of labor, achieving high effectiveness and quality in public production within the national economic complex.

5003

CSO: 2200

#### AVOIDING MANIPULATION OF FIGURES URGED

Sofia SCHETOVODSTVO I KONTROL in Bulgarian No 10, 1979 pp 3-5

[Editorial: "Annual Balance--A Responsible Task of Chief Bookkeepers and Accounting Collectives"]

[Text] The closing of accounts for 1979 and the establishment of end financial results and indicators for the past year are imminent.

This year the implementation of this responsible task must be carried out even more precisely, for this will determine the proper plan for the formation and distribution of the general income according to the directive approved with Decree No 36 of the Council of Ministers, dated 30 July 1979, and the precise determination of the share of the general income going to the budget and the other mandatory payments, and withholdings and payments to the wage fund based on results.

In this connection the chief accountants bear great individual responsibility to the labor collectives of the organizations for accurately determining the amount of funds for consumption and wages, and the distribution in the payment of bonuses for the fulfillment of annual production-economic tasks, based on the established factual contribution of teams and brigades to the results achieved, following the meeting of quantitative and qualitative indicators.

The timely preparations for the annual closing of books and organizing such work according to schedule and within the stipulated deadlines for the submission of accountability reports are prerequisites for the good implementation of such responsible assignments. The creation of such an organization is, above all, the task of the chief accountants. It must be done by them personally as heads of the financial-accounting services. They must directly control its implementation.

Our chief accountants have already acquired rich experience and are annually improving their organizational work. In many areas initiatives are launched aimed at improving and raising the level of financial-accounting work, improving internal financial control, and establishing and observing a strict schedule for documents turnover, the drafting of

accounting and statistical reports, and conducting economic studies. Mechanization and automation of computing and accountability processes are extensively becoming part of the work of the financial-accounting services. This has considerably facilitated the work of accountants and created real prerequisites for largely releasing them from monotonous operative work and for offering possibilities for intensifying preventive internal financial control, improving current studies, and actively influencing all materially responsible individuals and accountants who must provide prompt and factual assistance to the administration in managing economic activities.

Yet, the findings of the financial auditing authorities and partial investigations have indicated that in some places major omissions still exist in the organization of financial-accounting work. This is reflected in the work of drawing the accounting balances for the year and the establishment of accurate results. Such omissions lead to the drafting and submission of erroneous balances and accountability reports, violations of the regulations on the systems governing the formation and distribution of the general income, the illegal spending of consumption funds and, in the final account, to material and other liabilities.

As we know, one of the basic methods used in accounting in the annual closing of accounts is total inventory taking. The qualitative and timely performance of this work demands of all inventory commissions involved to be fully familiar with their obligations and responsibilities for violations of instructions. In addition to the legally stipulated requirements governing the taking of inventories, the accounting workers must coordinate their analytical and synthesized accountability and eliminate all disparities. Particular attention should be paid to investigating the real nature of all accounts in order to formulate claims on time and not violate limitations deadlines in submitting claims for fines and damages and losses. According to the new system such damages and losses must be taken into consideration in the determination of the general income. Consequently, whenever all legitimate grounds for this are present, the collectives are interested in being proved innocent and the losses and damages they have suffered, caused by other organizations, must be added to their income.

In taking inventories we must mandatorily determine which materials are unsuitable or in surplus, and be written or disposed of in accordance with regulations. The inventory-taking of unfinished production must be carried out with particular attention and accuracy. This will largely depend on the determination of the precise factual cost of production. Underestimating this task and violations of requirements governing its implementation through mandatory description, counting, weighing, etc., inevitably results in other violations of financial discipline.

The chief accountants must explain the importance of proper inventory taking to the heads and collectives of teams and brigades. The latter

have a direct interest in this, since it affects the determination of the factual savings they have achieved. The inaccurate assessment of unfinished production leads to erroneous assessment of production costs, reporting unachieved savings or overexpenditures, and recording inaccurate results of the application of internal and brigade cost accounting.

According to the approved systems governing the forming and distribution of the general income in industrial economic organizations, the general income comes mainly from the marketing of goods. For this reason the chief accountants must see to it, particularly at the end of the year, that all goods delivered or shipped have been properly documented and billed through 31 December. Billing for unfinished and undelivered goods is a severe violation of financial discipline and grounds for prosecution.

Along with the closing of accounts, the chief accountant must organize and personally participate in the thorough and comprehensive study of results of economic activities. Such an analysis should determine the factors which have contributed to better results or reasons for their worsening. The study must be supported by precise data so that the very report must include measures leading to the use of new reserves for the conservation of raw and other materials, fuel, and energy, upgrading quality and effectiveness, increasing foreign exchange earnings, and so on. The study must also contribute to the proper evaluation of the work of the individual units and the determination of their specific contribution to the overall income.

The chief accountants must establish a model organization for the annual closing of the books and ensure the drafting of an impeccable and accurate annual accountability report. They will thus prove their quality as organizers, economists, and finance experts and will justify the high trust which the party and the government have given them as heads of financial activities, accountability, and internal financial control.

5003

CSO: 2200

#### MINISTER OF METALLURGY AND MINERAL RESOURCES INTERVIEWED

Sofia RUDNICHAR in Bulgarian 3 Jan 80 pp 1-2

[Interview with Stamen Stamenov, minister of metallurgy and mineral resources: "The Only Way to Success Is the Steady Discovery and Utilization of Reserves for High Labor Productivity"]

[Text] Minister of Metallurgy and Mineral Resources Comrade Stamen Stamenov was asked by an editor to describe for the readers of RUDNICHAR the successes achieved in 1979 and the tasks to be implemented by the labor collectives in the fields of metallurgy, ore mining, and geological surveying in 1980.

[Question] Comrade Minister, 1979 was a remarkable year for the miners, metallurgical workers, concentration workers and geological prospectors who dedicated a great deal of effort to fulfill the instructions of the 11th BCP Congress and the directions issued by the National Party Conference on achieving high quality and high effectiveness. Could you describe briefly the achieved successes?

[Answer] In the course of the year a reorganization was made in the ministry and a conversion was made to the two-step management system. The Metalsnab DSO [State Industrial Trust] was included within its economic organizations. The possibility was created for the leadership to come closer to the management of production processes and for the ministry as a whole to better implement its role as the head producer and supplier to the national economy of ferrous and nonferrous metals and nonmineral raw materials.

The final results of the work done by the thousands of collectives are not as yet known. However, operative data lead us to believe that 1979 was a successful year. A new increase in the production of a number of goods was achieved, such as cold rolled and construction steel sheets, marble tiles and blocks, etc. All in all, the ministry expects that goods worth 55 million leva more than in 1978 will have been marketed.

A great deal of work was Jone to resolve the problem of the raw material base, the building of the Elatsite MOK [Copper Concentration Combine], and to resolve problems related to the new Asarel and Osogovo deposits. Good prerequisites for their faster development were created.

Efforts were made to secure the necessary machines and equipment for the building of major capacities at the Lenin SMK [Economic Mining Combine], the Elatsite MOK, etc. New capacities were commissioned: The Plant for Steel Wire and Cables in Roman and the Aluminum Processing Combine in Shumen.

The variety of goods produced was increased. The national economy received new brands of low-alloy steels, and new nonferrous metal goods for the requirements of the electronic, electrical engineering, and automotive industries. The first quantities of Bulgarian-made gas pipes were produced.

Social labor productivity rose six percent compared with 1978 while material outlays per 100 leva marketable goods were reduced by 0.22 leva.

Naturally, not everything went smoothly throughout the year. Major difficulties were created by the nonrhythmical supplying of basic raw materials which resulted in the idling of a number of production capacities. Idling developed also as a result of the still substandard maintenance and repair of equipment. Modernization and reconstruction remained slow. The commissioning of the belts at the agglomeration factory of the Kremikovtsi Economic Metallurgical Combine was delayed, as a result of which the planned capacity of the blast furnace production was not reached and, therefore, the necessary quantities of pig iron and steel were not produced.

[Question] Comrade Minister, the 1980 and 1981 ministry plan calls for increasing the volume of produced commodities, respectively, by 5.23 and 9.22 percent, and of social labor productivity by 11.55 and 11.28 percent compared with the preceding years. In 1980 the output is to cost one-half in terms of material outlays compared with 1979 and in 1981, by a factor of about 2.5 compared with 1980. What is being planned for the solution of these problems?

[Answer] Against the background of the existing weaknesses and the condition of the sector, these figures prove that the problems to be resolved will not be easy.

Above all, it will be necessary to take energetic measures to ensure rhythmical supplies of proper raw materials consistent with production capacities.

Secondly, the efforts will have to be focused on the prompt completion of priority capacities, particularly those for which output has been planned. This applies to the Elatsite MOK, the new capacities of the KOA [Aluminum Processing Combine] in Shumen and the ZSTV [Plant for Steel Wires and Cables] in Roman.

Thirdly, there must finally occur an upswing in the maintenance and repair of equipment and in the supplying of the necessary spare parts and the timely contracting for replacement equipment. If we fail to create a reserve of parts and sets for machines and machine units, the production combines and enterprises will be unable to operate normally. In this respect we are greatly relying on the newly built Metalurgremont Combine which will decisively influence improvements in this work.

The 1981 plan marks the beginning of the fulfillment of the Eighth Five-Year Plan. This sharply raises problems of the long-term development of the sectors and, particularly, the prompt determination of the new projects to be built.

Problems related to quality improvements play an important role in achieving the planned income for both years. The ministry has good achievements in this respect. A good tradition has been created. Of late, however, because of the worsened condition of the equipment, the quality of some of the goods produced at the Kremikovtsi SMK has worsened. The quality indicators of some goods were lowered even at such a renowned enterprise as the D. Ganev SKOTSM [Economic Combine for Nonferrous Metal Processing]. Such adverse trends must be immediately ended. The national economy requires the production not of that which is "possible" but that which is "needed." This is also demanded by the new economic mechanism already applied in industry.

[Question] Comrade Minister, the new economic mechanism, approved with Decree No 36 of the Council of Ministers, offers a number of advantages: The interest of all participants in the production process, ranging from the worker to the enterprise director, has been increased. What are the initial results of its application?

[Answer] The initial results indicate a better use of ways and means of labor and better utilization of labor itself.

The new economic approach to management raises problems as well.

In ore mining, for example, the systematic reduction of the metal content in the ores calls for the organization of production activities in such a way as to be able to effectually compensate for the increased leanness of the ores. In his respect even more extensive creative work must be done to increase the extraction of useful components contained in the ores. We must rapidly apply effective measures to increase the productivity of underground extraction and of the miners. It is absolutely imperative to

expand the retooling of und rground ore extraction and, wherever possible, to use new equipment and machinery. Unresolved problems remain in the transportation of the ores and of the concentrates, in blasting, and in the organization and synchronizing of the production chain.

Our study has indicated that in a number of activities the planned indicators, quality indicators in particular, will have to be greatly overfulfilled in order to ensure the necessary resulting wage fund.

This means that we must look for all possibilities offered by the production process and utilize anything which would increase economic benefits.

In this respect science must make a considerable contribution.

In his statements Comrade Todor Zhivkov indicated that the main prerequisite for resolving the problems of our development is the growth of the intellectualization of labor. This means the more active use of the opportunities offered by scientific services and by the modern accomplishments of scientific and technical progress. This will mean the better and fuller use of the intellectual and creative capabilities of scientific workers, specialists, workers, and of anyone serving the production process.

According to the plan in 1980, 27 million leva must be saved as a result of applied scientific development. The thermal system of the blast furnaces at the Kremikovtsi SMK must be improved; we must undertake the production of 12G-2BF thick steel sheets and master the production of shipbuilding steel sheets of standard and increased strength. Machines will be installed for steel processing outside furnaces. The complex mechanization of blasting operations at the Elatsite MOK will be applied. New pools for electrolytic metal extraction will be built. The technology for the production of new types of diamond bits will be improved. A metalogenic forecast map of the Rodopi mountain, Sredna Gora and other areas of interest from the geological viewpoint, will be charted.

The adopted program for modernization and reconstruction and their prompt implementation is another element of intellectualization.

All this does not cover the entire list of problems. It is obvious, however, that intellectualization requires that the subjective factor be emphasized and the thinking of engineers and workers be encouraged in such a way as to engage in real creative work and ensure maximum effectiveness in the sector. This calls for the mobilization of the forces, knowledge, and experience of the entire collective and of everyone employed within the ministry sectors.

The only road to success is the steady tracing, seeking, and utilization of ever new reserves for the fulfillment and overfulfillment of the production program, so that the income of the economic organizations may rise and, therefore, to increase the resulting wage fund to be distributed among the collective.

The successful solution of production problems will make it possible to honorably complete the Seventh Five-Year Plan and prepare for the solution of the problems of the Eighth Five-Year Plan.

We have the necessary forces and rich production experience to accomplish this. They must be utilized. Existing possibilities are far from exhausted. By finding and applying them on time we shall ensure a higher living standard to the Bulgarian miners, metallurgical workers, concentration workers, and geological prospectors.



5003

CSO: 2200

#### MINISTER OF ENERGY INTERVIEWED: REPORTS ACHIEVEMENTS

Sofia RUDNICHAR In Bulgarian 10 Jan 80 pp 1-2

[Interview with Minister of Power Supply Nikola Todoriev: "The Most Rational Utilization of Local Power Carriers is the Main Direction"]

[Text] Our representative asked Minister of Power Supply Nikola Tadoriev to describe the results of the fulfillment of the 1979 production program and outline the basic problems to be resolved in 1980 and 1981 by the collectives within the ministry's system.



[Question] Comrade Minister, the 11th BCP Congress and the National Party Conference faced the Bulgarian power industry with complex problems. Last year as well these tasks were in the center of attention of power workers, coal miners, mining construction workers, and designers. Tell us about the most outstanding successes and resolved problems in 1979.

[Answer] Above all, let me point out that in 1979 as well the Ministry of Power Supply fulfilled entirely its most important task of supplying the entire national economy and the population, in all areas of activities, the necessary electric and thermal power, coal, and briquettes. We were guided in our daily work by the stipulations of the slogan of the Seventh Five-Year Plan of high effectiveness and quality in all activities. This is confirmed by the fulfillment of the basic indicators of the 1979 plan.

Power plants within the ministry's system produced 5.7 percent more electric power or 1 billion 491 million kilowatt hours more than in 1978. Power plants using local fuels accounted for 65.6 percent or 866 million kilowatt hours of the increase. Compared with 1978 this means that the output rose 8.6 percent. Compared with last year the Kozloduy AETs [Nuclear Electric Power Plant] increased its electric power output, and so did the hydroelectric power plants. The production of thermal energy rose 3.1 percent. Coal extraction reached 29 million 470,000 tons, or 2 million 380,000 tons more than in 1978. We are pleased by the fact that the extraction of coal at the Maritsa-Iztok complex was increased by 11.9 percent. The production of briquettes totaled 1 million 336,000 tons or a 16.5 percent increase over 1978. Last year 2 million 148,000 tons or 12.4 percent more coal were delivered to the commodity fund compared with 1978. Within the same period the volume of overall industrial output was increased 8.6 percent.

In the course of the implementation of the 1979 production program we paid great attention to the struggle for reducing outlays of materials, fuels, and electric power. The results of the implementation of the plan in terms of technical and economic indicators confirms the good results of our work in this direction.

Specific outlays of conventional fuel for the production of one kilowatt hour of electric power has been reduced, according to preliminary estimates, from 393.9 grams in 1978 to 387 grams; electric power outlays for plant needs declined by 0.20 percent, including 0.12 percent in the thermoelectric power plants. Losses in the transportation, transformation, and distributon of electric power were lowered by about one percent.

These figures were indicative of the efforts of the collectives within the ministry's system to implement the decisions of the National Party Conference. The ministry's leadership rates highly the work of the

economic managements and trade union committees which are guiding the socialist competition toward resolving the most important economic problems. Praiseworthy, in this respect, is the example of our Heroes of Socialist Labor, our Order Bearers, and leading workers who, with their pledge-challenge of the end of 1978 gave an example of resolve and dedication in the implementation of the collectives' counterplans. Compared with 1978 the initiative of the leading workers of working without stragglers and for the rhythmical, ahead of schedule, and comprehensive implementation of counterplans was applied more extensively. This is confirmed by the numerous reports submitted by labor collectives to the ministry and the central committee of our trade union. Many of these collectives took additional obligations for even higher production successes.

[Question] Could you name some of these leading collectives who set the tune in the labor competition?

[Answer] The collective of the Balkanbas SMEK [Economic Mining and Power Combine] fulfilled its 1979 production program one month ahead of schedule, reporting the fulfillment of its counterproduction program for overall and marketable industrial output. The collectives of the Maritsa-Iztok-3 TETs [Thermoelectric Power Plant] and of the TsRB [Central Development Base] of the Maritsa-Iztok Mining-Energy Complex also announced one month ahead of schedule the fulfillment of their counterproduction plan for all physical and quality indicators. The collective of the Energoremont RP [Repairs Enterprise] fulfilled its counterplan for the first four years of the five-year plan one month and 15 days ahead of schedule. The brigade headed by technical manager Trendafil Stefanov at the Plovdiv EMU [Power Installaltions Administration] fulfilled its fiveyear production plan 15 months ahead of schedule. The brigade headed by Hero of Socialist Labor Georgi Asenov, at the Marshal Tolbukhin Mine in Ternik reported fulfillment of its five-year program as early as August 1979. In the course of the year it fulfilled its labor productivity plan 190 percent. Ivan Aleksov, face brigade leader at the Bobov Dol Mine fulfilled its pledge for all indicators by lower plant material expenditures per 100 leva of output by 0.69 leva rather than 0.26 leva. The collective of the Novi Ruditsi Mine in Marbas, headed by Honored Miner Yanko Marinov not only reported being ahead of schedule on its coal production program--40 days ahead of schedule--but lowered plant material outlays and improved the utilization of the working time.

Brigades of the Minstroy SO [Economic Trust], headed by Heroes of Socialist Labor Yordan Abrashev, Aleksandur Rusinov, and Zdravko Rudarski, Order Bearers Maksim Paskalev, Atanas Dobrev, and others completed the year with high overfulfillment of their pledges. May I use this opportunity once again to express the gratitude of the ministry's leadership in the collective of the electric power supply area in Mikhaylovgrad for its selfless toil and dedication in the prompt rebuilding of destroyed electric power cables and other power systems following the natural disaster which hit the area last February.

[Question] Good economic results in 1979 are a solid foundation for the further development for the creative forces of power workers, miners, mine builders, and designers. Could you tell us briefly of the tasks they face in 1980 and 1981?

[Answer] The party and the people's state have assigned us, power workers and miners, a leading position in building the material and technical base of the developed socialist society. That is why, the plan for the socioeconomic development of the country in 1980 and 1981, passed at the 12th session of the National Assembly, calls for developing the production of electric and thermal power by, respectively 11 percent in 1980 and 9 percent in 1981, converting to the more extensive use of local energy carriers.

The power industry is part of the four sectors, along with machine building and the chemical industries and metallurgy, whose share in the overall volume of industrial output will rise from 52.5 percent in 1979 to 53.7 percent in 1980 and 54.6 percent in 1981. In accordance with these stipulations the ministry formulated and adopted its plan for 1980 and 1981. The plan calls for the production of electric power in 1980 to increase 13.7 percent compared with 1979 and by 8.5 percent in 1981 compared with 1980. Within the same period the production of thermal energy will increase, respectively, by 14.5 and 9.9 percent. This year the extraction of coal will reach 33 million 220,000 tons; in 1981 the amount will be increased by 17.7 percent. This year we must produce 1.5 million tons of briquettes or 12.8 percent more than in 1979. Labor productivity will increase 17.1 percent compared with 1979 and the size of the personnel by 5,530. Compared with 1979 average wages in 1980 will be 9.7 percent higher.

In order to ensure the fulfillment of the production program, this year new energy generating capacities totaling 887 megawatts and 500 gigacalories will be commissioned mainly as a result of the expansion of the Kozloduy AETs, and the Varna, Maritsa-Iztok-3, and Sofia TETs. Next year the expansions of the AETs, the Ruse and Sofia TETs, and Devin VETs [Thermoelectric Power Plant] will contribute their capacities to the power system. New capacities will be installed for the production of another 2.4 million tons of coal this year and 1.2 million tons next year, focused mainly in the mines of Troyanovo Yug, Cherno More, G. Dimitrov, Merichleri, and Bobov Dol-Obedinen.

[Question] These figures indicate that the fulfillment of the production program in 1980 and 1981 will involve considerable stress unless the necessary measures have been taken promptly. In your view, what direction should be followed by the afforts of the economic managers, specialists, and workers collective!

[Answer] Above all, we must seriously improve the use of production capacities and the readiness and reliability in the work of machines and equipment in the power industry. Particular concern is needed to lower production outlays. Considerable possibilities remain for lowering outlays for electric power, fuels, and materials, lowering the amount of energy needed by power plants themselves and the specific outlays of conventional fuel in electric power plants, and reducing losses in the transportation, transformation, and distribution of electric power.

Efforts to improve the organization of labor must be continued with tireless energy. We must raise to a high level the use of working time and fully strengthen planning, technological, production, labor, and financial discipline.

According to the 1980 and 1981 plans the share of electric power produced by the TETs using local coal must increase. The highest participation in the solution of this problem is that of the collectives within the system of the Maritsa-Iztok SMEK. This year 77.1 percent of the entire increase in coal production within the ministry's system will be at the mines of the Maritsa-Iztok basin. That is why our main directive now is: "Coal, coal, and more coal!" We hope that the experience of the Heroes of Socialist Labor, the Order Bearers, and the remaining leading workers, in the full utilization of mining equipment will be applied by many collectives so that the collectives within the complex will carry out their assignments. In the future as well our work on the study and application of leading experience must be kept within sight by each economic management and trade union committee.

The contribution of scientific and design institutes will be important for the fulfillment of the production program for all indicators. Our economic managements must assign to them the development of effective technical solutions and make maximum use of their scientific potential. The work of the engineering-application organs must be guided dynamically and properly in order to ensure the fast utilization of developments in the field of technical progress, thus ensuring the fulfillment of the countereconomic plans in terms of quantity and quality indicators, and increased labor productivity which is a key problem for our production successes.

This year we shall celebrate the 110th anniversary of the birth of V. I. Lenin, the great proletarian leader. The time is also coming closer for the holding of the 12th Party Congress and the celebration of the 1,300th anniversary of the Bulgarian state. These remarkable events give purposefulness to the labor activeness of our collectives, mobilizing them for the overfulfillment of countereconomic plans in 1980 and 1981.

5003

CSO: 2200

#### MINISTER OF TRANSPORTATION SURVEYS 1979 ACHIEVEMENTS

Sofia TRANSPORTEN GLAS in Bulgarian 9 Jan 80 pp 1, 3

[Article by Vasil Tsanov, BCP Central Committee member and minister of transportation: "Answering the Party's Trust With New Labor Victories"]

[Text] The beginning of every year is always a good occasion for reviewing the distance covered. This review is accommanied by thoughts on the value of our actions while, at the same time, we turn our sights to the future.



Saturated with the powerful mobilizing force of the party appeal to fulfill assignments, the inspired competition, and the aspiration of the entire people, work in 1979 converted the fourth year of the Seventh Five-Year Plan into a constructive and fruitful year.

The past year was difficult and responsible for the thousands of railroad men, drivers, fliers, seamen, transportation and road builders, workers in the transport industry, and troops of the transport forces. Mobilized and united, the thousands-strong collective of the National Transportation Complex fulfilled its 1979 counterplan for transportation ahead of schedule for all basic economic indicators. The tasks set by the 11th BCP Congress and the National Party Conference on upgrading transportation effectiveness and quality are being successfully implemented.

Thanks to the accelerated utilization of scientific and technical achievements, and the improved organization and rhythm of the work of the basic transport junctions and ports, last year we were able to better satisfy the needs of the national economy for haulage. We successfully fulfilled our assignments on hauling imported and exported goods, thus making a real contribution to the implementation of the country's foreign exchange plan. We mastered the technology and applied contemporary organization of the work at the ferryboat complex. We participated more effectively in the timely harvesting and utilization of the crops.

Implementing the instructions of Comrade Todor Zhivkov on accelerating the pace of comprehensive modernization and reconstruction of rail transportation, a considerable improvement was achieved. We electrified another 248 kilometers and doubled tracks covering 114 kilometers. Capital and medium repairs were made covering 650 kilometers of tracks. We converted entirely to electric and diesel traction. As a result of this, last year the railroads hauled over 2.5 million tons of freight more than in 1978. We commissioned the Sofia-Mirovo and Yana-Chavdartsi Monument highways. Compared with 1975 we installed twice the amount of capital assets.

These successes are indeed considerable. However, our accomplishments still are far from adequate if we are to speak of the quality change required by the party and by the intensive development of the economy. We well understand that we have a great deal of unusual reserves and that we have still not completed the reorganization of some of our cadres. We have not entirely surmounted the contradiction between objective possibilities and their utilization. We are aware of these weaknesses and are trying to eliminate them. This is a great possibility for the implementation of the strategic tasks facing us.

The first 10 days of the new year are already coming to an end. Thanks to the prompt measures which were taken the transport collectives, from the very first working day, created the necessary organization for the

implementation of the major and responsible tasks based on the new plan. Under difficult winter conditions, these days drivers and railroad men, port workers, seamen, and fliers are waging a real battle for maintaining the normal rhythm of the national economy.

With the 1980-1981 plan we are entering a new major stage of our socioeconomic development. What is characteristic of 1980 and of the new plan? What is it that distinguishes this plan and how is the last year of the five-year plan radically different from the previous ones?

Above all, this is a year of transition and of a link between the Seventh and Eighth Five-Year Plan. With the fulfillment of the 1980 plan we shall decide the ahead-of-schedule fulfillment of the five-year plan and create a base for the Eighth Five-Year Plan-the five-year plan of scientific and technical progress.

Secondly, 1980 is a year of the completion of the implementation of the decisions of the 11th Congress and of active preparations for the 12th Party Congress and of the celebration of the 1,300th anniversary of the Bulgarian state. Consequently, the 1980 plan is of exceptional political importance.

Thirdly, the 1980-1981 plan has a new quality, for it contains the profound ideas of Comrade Todor Zhivkov developed at the 31 October 1979 National Conference on decisively upgrading the role of technical progress, improving the socialist organization of labor and planned management, converting management to the principles of the economic approach, and the intellectualization of material production and other realms of the national economy.

Fourthly, a particularly characteristic feature of the plan is that it will be implemented under the conditions of the new economic mechanism and the new wholesale prices, and with the application of the new consolidated rates network and wages.

The plan is distinguished by its stable and rising pace, thus ensuring the further implementation of the tasks assigned to us by the 11th BCP Congress and the National Party Conference. It is backed by the further intensive development of the integrated transport system and the individual transport facilities.

Our task now, the task of the subjective factor, is to make full use of these opportunities and convert them into results fitting the planned figures.

The plan must be considered only as a base. The task now is, using the measures elaborated in terms of it, for each economic organization and unit to ensure, within the framework of the resources included in the plan, the reaching of higher effectiveness and higher results. In other words, the plan must be steadily improved throughout the year.

What are the basic tasks set with the 1980 plan?

First of all, the even more efficient utilization of assets, fuels, energy, and raw and other materials, and social labor savings.

How to organize the implementation of this responsible assignment and what should our contribution be to its implementation?

Above all, we must achieve an upturn in the application of the achievements of scientific and technical progress and of the most modern technical organizational solutions. To this effect, this very month, all economic organizations, branches, and units must review the engineering plans and amend them on the basis of the new views and, particularly, the broad assignments outlined by Comrade Todor Zhivkov in his report to the National Conference, last October. New decisions must be applied as early as 1980 and the elaboration of others must be undertaken, to be applied and utilized quickly in the forthcoming years.

An important task in 1980, to which particular attention should be paid, is to improve the norms on the handling of transport facilities. On this subject the collegium of the Ministry of Transportation took the decision that within a short time the existing norms governing the various items and the stipulations of the new economic mechanism must be revised and codified within a single document mandatory in the conclusion of all contracts and in all transportation. Anyone who does not load and unload promptly or who holds back transport facilities for all possible reasons should be subjected to severe economic sanctions; this should also be done in terms of the norms governing the utilization of construction and loading and unloading mechanization facilities.

Another important task this year is to improve even further the use of the Varna-Ilichevsk ferryboat and the work of the ports, ensuring the rhythmical and full loading of the ferryboats and their mechanization. We have set ourselves the task of reducing, within the next few months, the round trip of a ferryboat by 12 hours.

An exceptionally important and basic task is to ensure the completion of the target process of modernization and reconstruction. In 1980 we shall make capital investments totaling 757 million leva. Capital assets worth nearly 600 million leva will be installed. We must complete the electrification of another 212 kilometers and double the tracks along 128 kilometers of railroads, and build 14.5 kilometers of new highway sections.

In this connection, the immediate task is to rapidly formulate and ratify the comprehensive target programs and schedules, securing the full concentration of forces and resources and find additional scientific and technical solutions particularly in resolving bottlenecks. By decision of the Council of Ministers, currently a review is underway of plans for all new projects to be built this year so that they may include the latest solutions and scientific and technical achievements, modern technologies, electronization of processes, and higher level of labor intellectualization. This task must be carried out exceptionally carefully and intensively and completed by no later than 30 March. Henceforth, a project not including the most modern scientific and technical solutions will no longer be financed. New effectiveness criteria and norms will be introduced. Construction work will be based on normative profitability. This year we must make a turn in our work in applying the catalog system in construction.

In order to respond to the new requirements, it is particularly imperative now to rapidly surmount inertia and reorganize the entire work of the construction workers. This year everything must be done to ensure the timely completion of target projects with a view to the commissioning of target projects and honorably fulfilling the annual plan for the installation of capital assets.

Currently we are faced with a number of major tasks in connection with the fulfillment of the foreign exchange plan. Our collectives engaged in tasks related to the foreign exchange plan are reviewing their overall work and introducing new aspects and solutions aimed at decisively upgrading foreign exchange effectiveness. Today it is very important to take most fully into consideration the circumstances on the international transport market and make maximum use of the possibilities offered by the new economic mechanism.

The new plan greatly emphasizes the task of accelerating the reorganization of our engineering-application activities. First of all, we must strengthen the established engineering-application organizations and give them priority in the implementation of the plan. In this connection, recently the Collegium instructed the managements of the economic organizations to assess within the shortest possible time and to take all the necessary measures enabling the engineering-application teams to assume their full functions. We are also reviewing the tasks related to technical progress based on the requirements of the plan and the requirement of intensifying the contribution of the scientific units.

The basic problem to which exceptional attention must be paid now is the formulation of the Eighth Five-Year Plan. Currently, all our teams, subunits, and scientific and economic organizations are intensively formulating the new comprehensive program for the development of the transportation system in the Eighth Five-Year Plan and through 1990. This will most fully implement the stipulations of Comrade Todor Zhivkov of 31 October 1979. By decision of the ministry's leadership, the formulation of this program everywhere must be subjected to extensive and profound discussion with the participation of scientific workers, managers, leading specialists,

and noted leaders and innovators of the primary units. By the end of this month the ministry collegium will discuss and adopt a comprehensive program for the entire complex and by economic organization.

Such elaborations and the improvement of the 1980 plan must be based on the accelerated application of significant scientific and technical achievements which should yield rapid results and lead to a drastic upgrading of labor productivity, above all in the bottlenecks.

Particular attention should be paid to the rapid application of automated operative constrol systems in all types of transport, above all in the railroads, along with comprehensive technologies for noncontainerized haulage, palletizing and containerizing, the use of elastic containers, and the building and commissioning of systems for railroad automation and remote control, an automated system for air traffic control, acceleration of microprocessor developments, etc.

The plan sets new tasks also in terms of further improvements in material and technical supplies. The first task is to strengthen the marketing and supply organizations and their units ensuring the rhythmical supplying of balanced resources as stipulated in the plan. Today it is very important to ensure rhythmical deliveries of the planned tracks, metals, cables, timber and quarry materials, and other nonbalanced materials supplied on a contractual basis.

I would like to emphasize that according to the new mechanism the entire burden and responsibility for organizing material and technical supplies will be shifted to the economic organizations. For this reason all economic organizations and branches must take rapid measures to reorganize the units in charge of trade activities in accordance with the new requirements and criteria.

In order to fulfill the responsible assignments contained in the 1980 plan, further management improvements are becoming extremely necessary. In this case the decisive feature is the total reorganization of our work in accordance with the principles of the new economic mechanism and of Decree No 29.

It is a question, above all, of a new approach and a new measure of responsibility. Now every manager directly ensures and guarantees the self-financing of the unit and the people's wages. This enhances even further the importance of the question of creative risk in work with cadres, as developed by Comrade Todor Zhivkov at the National Party Conference. Today every manager will have to take properly calculated risks and display more initiative and, therefore, achieve higher results. We must introduce everywhere a new standard of efficiency, creativity, and exactingness. Discipline must be strengthened through a new approach.

We must be intolerable of weaknesses and burn out with a hot iron any manifestation of sluggishness, bureaucracy, looseness, and verbiage!

The new requirements sharply raise the question of improving the efficiency of management and converting it to an economic base, i.e., drastically reducing the number of people and outlays of administration work and, on this basis, ensure the self-financing of management. We are even more emphatically faced with the tasks of reorganizing the training and selection of cadres and, above all, increasing their economic and technical training. Special concern must be devoted to decisively improving the work with young transport workers and specialists so that the decisions of the National Komsomol Conference may be implemented in a model fashion.

Along with these basic problems we are faced with the no less important tasks of improving the socialist organization of labor, upgrading traffic safety and service standards, reorganizing socialist competition in accordance with the principles of the new mechanism, and others.

The problems we must resolve in the last year of the five-year plan are responsible and extensive. The new five-year plan and the 12th BCP Congress will be welcomed with the results which we will achieve. This demands of us, the workers in transportation, full mobilization of our efforts, talents, inspiration, ambition, and dedication, in order to make an even more significant contribution to the implementation of the party's instructions and fulfill ahead of schedule the Seventh Five-Year Plan.

We are confident that the trained and thousands-strong transportation collective will have answered, as always in the past, the trust of the party with new accomplishments and new victories.

5003 CSO: 2200

## INSUFFICIENT FERTILIZERS, OTHER PROBLEMS DISCUSSED

Sofia KOOPERATIVNO SELO in Bulgarian 26 Jan 80 pp 1-2

[Interview with Goryan Kotev, general director of Agrochemical Services State Economic Trust, about questions having to do with the quality, quantity and on-time supply of chemical fertilizers for agriculture, by Rumyana Penkova, time and place not indicated: "Are We Ensuring Fertility?"]

[Text] By virtue of its activity the Agrochemical Services State Economic Trust is directly involved in increasing the quantity and raising the quality of plant-growing output. Its obligation is to ensure soil fertility, to provide agricultural production with chemical fertilizers in sufficient quantity and of the appropriate kind. A representative of the editorial board talked with Goryan Kotev, general director of the Agrochemical Services State Economic Trust, about the fulfillment of this function and about the problems that the trust is encountering.

[Question] For year after year chemical fertilizers have been the "Achilles' heel" of plant-growing. The result is often that the use of new technologies in raising a given agricultural crop is frustrated due to the lack of chemical fertilizers. Are these allegations true, Comrade Kotev?

[Answer] There is a certain truth in these allegations. It is true that our chemical industry is developing successfully and that the production of chemical fertilizers is increasing. But something else that is not beneficial to agriculture is true, too. In recent years the plant industry has received from 60-70 to 80 percent of the fertilizers that would have made possible the fulfillment of plans and the production of the necessary plant-growing output.

What is more, in 1980 again, 20 percent of the necessary quantities of chemical fertilizers will not be supplied. Broken down by types of fertilizer, supplies will be as follows: 79 percent of nitrogen fertilizers,

82 percent of phosphorus fertilizers and 80 percent of potassium fertilizers. It must be emphasized that the management of the trust has made many attempts and put forth many efforts to change the situation but we have achieved no positive result.

Our task is, by utilizing the scientific achievements in agricultural chemistry, to determine the plant industry's chemical fertilizer requirements that will make possible fulfillment of the plan, and after we provide them, to allocate them by types and according to the agrotechnical needs of every crop throughout the country. Besides this, we must monitor the observance by fertilizer producer enterprises of quality criteria according to the Bulgarian State Standard. And see to the proper storage and utilization of fertilizers and, if mecessary, redistribute them from one place to another.

But what happens? Can we perform our obligations properly? Let us say frankly, not always. We can make recommendations for the use of fertilizers; we have good specialists who know their duties perfectly. We can set up monitoring. But when there are not enough fertilizers, our job is quite limited.

There are slip-ups, too, in the monitoring of fertilizer storage and utilization. It will be hard to eliminate these until, first and foremost, the directors and specialists of agroindustrial complexes, industrial-agrarian complexes and scientific production combines are made aware of the soundest utilization of the existing fertilizer storage capabilities. And, secondly, until the necessary warehousing facilities are provided in agriculture. But I want to emphasize the fact that there are complexes with limited means that are solving the problem well with their present resources.

[Question] It is known that it is not enough merely to provide fertilizers. Very important in order to get good results are: What is their quality? When are they delivered? Can one count on them when they are most needed?

[Answer] In our opinion, those are fundamental questions that have to be solved as fertilizers are used. Because every agronomist knows that even though he doesn't give a plant the entire amount of fertilizer, if he gives what he has at the most appropriate time, the result will be very good.

Our trust participates directly in the preparation and approval of the Bulgarian State Standard for the quality of the chemical fertilizers produced in our country. We also keep watch on its observance. As a result of our systematic monitoring, we have changed the prices of the superphosphate produced at the Dimitrovgrad Economic Chemical Combine and of the compound fertilizers produced by the Devnya Economic Chemical Combine since they did not meet the standard. In both cases (1) the application

of the fertilizers to the soil is hampered and (2) the result they give is lessened due to their nonuniform distribution (this discrepancy amounted in some places to 20-30 percent). For more timely and effective monitoring we have set up a laboratory for daily checks on fertilizer quality.

We have always insisted at the Ministry of the Chemical Industry that we get fertilizers conforming to the biological requirements of plants and in keeping with accepted techniques of raising agricultural crops. But I want to give an example. For the first half of 1979 300,000 tons of nitrogen fertilizer (in pure substance) were needed, and for the entire year 430,000 tons. Despite the fact that the ministers of foreign trade, of the chemical industry and of agriculture and the food industry had signed a joint memorandum in December 1978 for the provision of 260,000 tons during this period, agriculture received 234,000 tons. And the difference between what was targeted and what was received was still greater in the first quarter when nitrogen for the nourishment of winter wheat was especially important.

Furthermore, out of the total amount of nitrous fertilizers, 20,000 tons should have been set aside for use in the example of natural calamities and emergencies. But in fact no such reserve exists. When we have to respond quickly, we do so, but in such cases the fertilizers are supplied at the expense of other, nonstricken regions. The phosphorus fertilizer situation is similar, too.

The reasons for this are certain incongruities in the operations of the Ministry of the Chemical Industry that go unremedied year after year.

The fault for untimely delivery to customers often lies in the lack of suitable transportation. Rail transportation does not have enough special cars to carry the fertilizers. Transportation is especially poorly organized by Devnya.

[Question] We have entered upon the last year of the Seventh Five-Year Plan, during which still greater attention will be paid to new progressive forms of organization, to the application of technical progress and scientific achievements in agriculture. How will the Agrochemical Services State Economic Trust proceed with its work for fulfillment of these important tasks?

[Answer] The approved program for chemization of the national economy during the Eighth Five-Year Plan provides for the granting of significantly larger quantities of chemical fertilizers to agriculture. In 1981 25 kilograms (in pure substance) per decare of tillable soil will have to be provided. In order for this to take place, the modernization and reconstruction of plants are envisaged starting right now in 1980, with nitrogen fertilizer production in 1985 increasing 46 percent (over 1979), and phosphorus fertilizer production 52 percent.

The reorganization of the chemical combines will improve the mix and quality of chemical fertilizers, with an increase in the production of [word illegible; possibly "do-," extra-] concentrated fertilizers--carbamide, ammonium nitrate and triple superphosphate.

Effective utilization of chemical fertilizers involves, first and foremost, their proper storage, transportation and application to the soil. A uniform technology has been developed for the transportation, processing, storage and application of chemical fertilizers. Implementation of the technology will begin in 1980. It will provide for the investment of about 143 million leva for the reconstruction of the chemical plants, for the supply of the necessary transport facilities, for the building of 140 fertilizer storage warehouses and for high-efficiency fertilizer equipment.

The economic substantiation of the program shows that the capital investment in it will be recovered in approximately just 3 years by cutting down the production costs and storage losses of chemical fertilizers.

A rise in the effectiveness of chemical-fertilizer utilization will also be achieved by the adoption in practice of the second approved model automated fertilizer system developed by the N. Pushkarov Institute of Soil Science and Yield Programming. In the coming years we shall continue our joint effort to include all the country's tillable land in the automated system and make recommendations for the differentiated fertilization of every field in the agroindustrial complexes, industrial-agrarian complexes and scientific production combines.

On the basis of the 1979 experience in the production of corn for grain by the yield-programming method and on the basis of engineering plans, we shall continue further work to raise all basic crops in accordance with engineering plans.

After the creation of the material and technical base targeted in our plans, the Agrochemical Services State Economic Trust will encompass the scientific, methods, supply and production activity involved in the chemization of agriculture for the entire country.

6474 CSO: 2200

#### CSSR ECONOMIC PLAN FULFILLMENT

Prague RUDE PRAVO in Czech 25 Jan 80 pp 1, 2

[Report by the Federal Statistical Office: "Fulfillment of 1979 Plan"]

[Text] The development of the national economy in 1979 continued essentially in accordance with the intentions of the Sixth Five-Year Plan. The CSSR economic potential further increased. According to the preliminary data, the national income was by 2.6-2.8 percent higher than in 1978 (in terms of comparable prices of 1977).

The plan fulfillment was accompanied by extraordinary difficulties. The fuel and energy problems at the beginning of the year and smaller agricultural harvest further complicated the already difficult situation brought about by the development on the foreign markets.

The lag in achieving the planned production volume at the beginning of the year was gradually reduced by self-sacrificing work of all people involved and effort of party, state and mass organs and organizations.

In comparison with 1978, industrial production increased by 3.7 percent. The average production increase in the entire industrial sector was surpassed, due particularly to the development programs, by engineering production, chemical production and production in some other branches based on domestic raw materials. Although the industrial production increase was below the plan, smaller production in some sectors (such as electric power) was due to smaller consumption.

Unfavorable weather conditions intensified the discrepancy between the development of crop and animal production. Generally speaking, gross agricultural production was by 3.9 percent smaller than in 1978 including crop production which was by 9.2 percent smaller (at stable 1967 prices). Considerable quantities of grains had to be imported in order to secure the necessary quantity of fodder for the development of animal production.

The volume of construction work increased by 3.7 percent. The lag in the plan fulfillment which arose at the beginning of that year, however, could not be completely made up for.

In comparison with 1978, the general level of industrial production costs was relatively reduced. This was due to the smaller consumption of some basic types of fuels, energy and raw materials per unit of production. In comparison with 1978, labor productivity increased by 2.9 percent in industry, by 3.1 percent in the building industry, but its growth rate was lower than anticipated by the plan.

In comparison with 1978, the foreign trade turnover increased by 10.8 percent and in relation to the socialist countries by 9.2 percent (at current prices). Cooperation in the implementation of the comprehensive program of socialist economic integration intensified both by Czechoslovakia's participation in the development of selected raw materials branches and increasing production specialization and cooperation particularly with the Soviet Union.

In comparison with 1978, 1.6 percent more fully were invested in the national economy. The planned volume of construction with was not reached in the structure of capital investment projects and illiveries, while the planned shipments of machinery and equipment were surpassed. In comparison with the previous years, the plan fulfillment on some key projects improved. Additional new production and nonproduction capacities were put into operation.

Despite the complex economic conditions, we have succeeded in maintaining and in some respects even improving the living standard of the population. In comparison with 1978, individual monetary incomes increased by 3.6 percent, the retail trade turnover by 3.6 percent, population's social consumption by 4.4 percent. The real monetary incomes increased by 0.6 percent. A total of 102,600 apartments were completed and additional day nurseries and kindergartens were opened.

Although a number of favorable results were achieved, our economic development encountered many problems and shortcomings. The planned production volume was not reached, the assortment structure of industrial production and quality of some products did not meet the requirements of the domestic and foreign market. The results achieved in savings and more effective utilization of energy, raw and industrial materials, and fodder are still inadequate as is the practical application of scientific and technological achievements. The desirable change in capital construction was not achieved. The failure to achieve planned efficiency and smaller production of national income slowed down the growth rate of the used national income.

There still are considerable reserves in the national economy to which the 14th plenary session of the CPCZ Central Committee drew attention. It emphasized the necessity of rendering management more effective at all levels

as the primary requisite and great reserve at the same time for the solution of the existing problems. The more demanding conditions of development than those anticipated by the Sixth Five-Year Plan unconditionally call for the most effective utilization of material, labor and financial resources, and much more rapid application of scientific and technological achievements.

## Industry.

In comparison with 1978, industrial production in the centrally planned industry increased by 3.7 percent (at comparable spices of 1 January 1977).

The slowdown in the growth rate of production was caused primarily by the shortcomings in electric energy supply at the beginning of the year and by the smaller increase in food industry production due to the smaller amount of agricultural products.

The fulfillment of the 1979 plan laid extraordinary work demands on workers in industrial enterprises. The delay in the plan fulfillment at the beginning of the year amounting to 3 workdays was gradually reduced. The accomplishment of this demanding task was further exacerbated by the uneven fulfillment of production plans by individual enterprises which affected the overall rhythm of production and customer-supplier relations.

More than 20 percent of industrial enterprises failed to meet the production targets set by the annual plan. In the total production volume, the planned tasks were not completely met particularly by the food industry, industry of building materials, glass, porcelain and ceramic industry. The uneven fulfillment of tasks by individual industrial enterprises was even more markedly reflected in the comprehensive evaluation of the fulfillment of planned tasks on the basis of selected mandatory structural and qualitative indicators.

As to the individual final directions of sales of industrial production, there was an increase (at wholesale prices as of 1 January 1977) in the deliveries to domestic trade by 2.5 percent, a 3.6 percent increase in deliveries for exports, a 1.8 percent increase in the shipments of machinery and equipment for capital investment projects (the plan called for an 8.7 percent reduction in relation to 1978). The needs of domestic and particularly of foreign trade were not completely satisfied in the required volume, structure, quality and assortment of products. Likewise, some machinery and equipment were not delivered for major construction projects.

The general level of industrial production costs was reduced. In comparison with 1978, the share of overall costs in output was relatively reduced by 0.6 percent: material costs were reduced by 0.8 percent and wage costs by 0.3 percent.

Labor productivity in the centrally planned industry (in terms of gross production per worker at comparable prices as of 1 January 1977) increased by 2.9 percent over the 1978 level, that is by 0.4 points less than the plan had called for. Labor productivity increase accounted for 79 percent of the industrial production increase. The average monthly wage of workers in the centrally planned industry amounted to Kcs 2,697 and increased, in comparison with the previous year, by 2.8 percent (that is by Kcs 74). The relation between the development of labor productivity and increase in average industrial wages was not maintained in accordance with the plan due to the more rapid increase in wages and smaller increase in labor productivity.

The utilization of the working time of blue-collar workers attained 91.8 percent in 1979 and was 0.2 points below the 1978 level. At the same time, the share of overtime work of blue-collar workers increased from 5.7 percent in 1978 to 5.8 percent in 1979. In comparison with the previous year, there was a slight increase in the coefficient of shifts worked in 1979 which resulted particularly from the extraordinary afternoon and night shifts designed to make up for the production losses that occurred at the beginning of the year.

The centrally planned industry employed on the average 2,630,000 workers in 1979, that is 20,700 (or 0.8 percent) more than in 1978.

In comparison with the previous year, production increased in all industrial sectors, with the exception of heat and electric power generation, in 1979.

Gross Production Increase According to Planning Groups in 1979

	1979 in % of 1978
Coal production	101.3
Heat and electric power production	98.9
Metallurgy including ore mining	102.0
Engineering	106.6
Chemical industry and crude oil processing	102.5
Rubber industry and processing of plastics	105.4
Pulp and paper industry	102.8
Building materials industry	103.0
Woodworking industry	105.0
Glass, ceramics and porcelain industry	104.6
Textile industry	103.9
Garment industry	104.3
Leather, shoe and furrier industry	102.8
Printing industry	102.5
Food industry (Ministry of Agriculture and Food)	102.0

The following results were achieved in individual industrial sectors in 1979:

In the coal industry, the output was 124.7 million tons of coal and lignite that is by 1.2 percent more than in 1978. The output of brown coal and lignite was 96.2 million tons (a 1.4 percent increase); of pit coal 28.5 million tons (a 0.6 percent increase). The state mining plan was surpassed by 0.4 million tons. The overall coal supplies at the principal big consumers were by 98 percent larger at the end of 1979 than at the end of 1978 and by 195 percent in the thermal power plants of the Federal Ministry of Fuels and Power (FMPE).

The problems with the rock removal encountered in the previous years persisted in 1979. The plan of the overburden removal was fulfilled 92.4 percent. The prospects for increasing the brown coal output in the future are therefore not particularly good.

Electric power production amounted to 68.0 billion kWh, that is by 1.5 percent less than in 1978. Production decreased by 5.3 percent in the thermal power plants of FMPE, but increased by 2.2 percent in the hydroelectric power plants. The nuclear power plant V-1 at Jaslovske Bohunice produced 2.1 billion kWh of electric energy which was 3.2 percent of the total electric power production.

Following the emergency measures aimed at the reduction of electric energy consumption in January and February, electricity supply to the national economy was generally smooth. This was achieved particularly by the more effective enforcement of economy measures and rationalization of heat and electricity consumption. This resulted in the 0.8 percent reduction of total power consumption by the big consumers in comparison with the previous year.

In the metallurgical industry, the total production volume increased by 2.0 percent: the output in ore mining increased by 2.0 percent, in ferrous metallurgy by 1.9 percent and in metallurgy of nonferrous metals by 2.8 percent. Steel production amounted to 14.8 million tons, which was by 3.1 percent less than in 1978. Production or rolled material from high-grade steel increased by 5.2 percent, sheets by 1.8 percent, steel pipes by 1.7 percent and copper pipes by 5.6 percent.

In comparison with 1978, engineering production increased by 6.6 percent. including heavy engineering by 6.0 percent and general engineering by 6.9 percent. The higher growth rates were achieved in products and sectors included in the development programs: their overall production volume increased by 9.5 percent. The production increases were as follows: equipment for the nuclear power plants 95.9 percent; machinery for surface mining of brown coal 47.8 percent; semiconductor equipment 15.2 percent; microelectronic circuits 36.2 percent; numerically controlled machine tools 22.3 percent; and trucks 8.7 percent.

Among the consumer goods manufactured by the engineering industry, there were increases in production of refrigerators for households--3.4 percent; radio receivers including phono-radio combinations--12.0 percent; one-track motor vehicles--9.7 percent.

Total production in the chemical industry increased by 2.9 percent. The highest increase--5.4 percent--was achieved in the rubber industry and processing of plastics. In comparison with 1978, the largest production increases were: plastics--5.0 percent; tires for trucks and buses--2.7 percent; polyamide fabric--4.9 percent and polyester fabric--4.1 percent.

Industrial production of building materials increased by 3.0 percent, that is by 2.1 points less that the state plan had called for. In comparison with 1978, production of ceramic wall tiles increased by 10.7 percent, of asbestos-cement pressure pipes by 13.7 percent and burned ceiling beams and boards (Hurdis) by 9.4 percent.

The overall production volume of the consumer industry increased by 4.0 percent. The biggest production increase was achieved in the woodworking and glass industries. Furniture production increased by 6.7 percent, window glass by 7.3 percent, knitted garments by 4.8 percent, underwear by 1.1 percent and poromer shoes by 4.8 percent.

The food industry increased the total production by 2.0 percent. The largest production increases were achieved in confectionery and candy production--6.2 percent and meat production--3.0 percent. The smaller shipments of agricultural raw materials slowed down the production increase particularly in the milk industry.

## Agriculture

Unfavorable weather conditions adversely affected the results in agriculture. Poorer harvest of most agricultural products as compared with 1978 resulted in the decline of crop and general agricultural production.

# Trend in Agricultural Production at 1967 Stable Prices (in billion Kcs)

		Reality in		Plus or Minus	
		1978	1979	Difference Reality 1978	Plan 1979
			(preliminary)		
Gross agric	ultural production,				
total		83.3	80.0	- 3.3	- 5.5
including:	crop production	37.9	34.4	- 3.5	- 4.8
	animal production	45.4	45.6	+ 0.2	- 0.7

The grain crop (including corn) amounted to 9.2 million tons which was by 19 percent less than the plan had called for. In comparison with our record grain crop of 1978, the 1979 harvest was smaller by 1.7 million tons. The

decline was affected by the lower yields per hectare. The average grain hield per hectare of 3.47 tons was by 0.68 tons smaller than 1978. A noticeable decline in the yield per hectare and harvest of grains took place particularly in South Bohemia and South Moravia krajs.

The potato harvest amounted to 3.7 million tons, which was by 0.25 million tons less than in 1978 (and by 6 percent less than the plan had called for). A total of 7.9 million tons of sugar beet were harvested which was almost 10 percent below the plan, but by 0.6 million tons more than in the previous year. The harvest plan was fulfilled 76 percent with reference to perennial fodders and 89 percent in regard to hay from meadows. The harvest of corn for silage exceeded the plan target by one percent. The 1979 fruit crop was 16 percent below the 1978 level, but vegetable harvest was 2 percent larger. Due to the high rate of rape drilling, its crop was less than 50 percent of the 1978 crop and this was reflected in the generally smaller crop of oil plants which was almost by one-third smaller than in 1978 and approximately 40 percent below the 1979 plan.

In animal production, the cattle population increased by 27,000 head and poultry by 1,394,000 above the 1978 level. The number of pigs declined by 13,000. The average annual milk production per cow increased by 21 liters in comparison with 1978 (it amounted to 2,956 liters), the average annual egg production per hen was 224.2 (225.5 in the previous year). In comparison with 1978, poorer results were likewise achieved in the breeding of the young and fattening of cattle and pigs. The average live weight of cattle for slaughter declined to 467 kg (it was 477 kg in 1978), while in pigs for slaughter increased to 110 kg (it was 109 kg in 1978).

In view of the poorer harvests and inadequate care of domestic fodders, it was necessary to import considerable quantities of fodders above the plan. In comparison with 1978, the 1979 purchases of all products were larger, although the purchase target was met in regard to poultry for slaughter only. The purchases of other products were far below the plan. The deficit amounted to 119 million liters in the case of milk, 37,000 head of animals for slaughter (including 8,000 head of cattle for slaughter, 28,000 tons of pigs for slaughter) while the deficit in the purchase of eggs amounted to 10 million.

# Purchase of Animal Products

	Reality in		Increase over	
Unit	1978	1979	1978	
Slaughter animals, total 1,000 tons				
(excluding poultry) live weight	1,545	1,576	+31	
including: slaughter cattle " slaughter pigs "	639 879	660 889	+21 +10	
Poultry for slaughter live " Milk million liters Eggs million	223 4,873 2,461	238 4,921 2,540	+15 +48 +79	

Agriculture received 7,517 tractors, 1,296 grain combine harvesters, 459 potato harvesters and 861 tractor-pulled planters. Moreover, the capacity of livestock barns increased and the capacity of drum drying plants and fodder compounds producing plants expanded.

In 1979, 61,200 hectares of agricultural land were reclaimed by draining of marshy areas and irrigation of 19,400 hectares. Consumption of industrial fertilizers in terms of pure nutrients per hectare of agricultural land reached approximately 254 kg. Nitrogen fertilizers accounted for 36.1 percent of all deliveries.

# Forestry and Water Management

Forestry fulfilled the tasks set for timber production and deliveries of lumber. The output amounted to 18.4 million cubic meters, that is by 0.5 million cubic meters more than in 1978, while the shipments of lumber to the domestic market and for exports reached 16.8 million cubic meters and were by 0.3 million cubic meters larger than in 1978. Timber from the trees damaged by the natural disasters accounted for 37.7 percent of the total output.

A total of 1.45 billion cubic meters of drinking water were produced which represents a 3.5 percent increase over 1978.

The public water system supplied water to 69.9 percent of the entire population by the end of 1979 (the corresponding figure was 68.2 percent in the previous year). The ratio of the population residing in the houses hooked up to the public sewer system increased from 55.1 percent in 1978 to 56.2 percent in 1979.

## Building Industry

The construction enterprises carried out, with their own labor force, by 3.7 percent more construction work than in 1978. The delay in construction work which took place in the first 2 months of the year was not made up for the rest of the year and the planned volume of construction work was therefore not achieved. The nonfulfillment of the plan was among other things affected by the unpreparedness of construction sites and design of projects, and to some extent also by the inadequate organization and management in some construction enterprises.

The deviations from the original plans were reflected in the structure of construction work. The planned volume of construction work was not reached in the capital investment projects and particularly in comprehensive housing construction. Despite the fact that the capital investment projects did not proceed on schedule as a whole, the deliveries to the mandatory construction projects were completed.

The relatively largest number of construction enterprises failed to fulfill their tasks in the volume of construction work carried out on the basis of supplier contracts on the projects with the budget costs exceeding Kcs 2 million which are subject to the regulations on the unfinished projects, and on the projects in the so-called preferred areas.

The construction enterprises employed on the average 556,700 workers, which was by 3,000 workers more than in 1978. The labor force increased particularly in nonconstruction operations of construction enterprises—in transportation and industrial operations. The planned employment, however, fell short of the goal by 1,700 persons.

Labor productivity of the workers in the construction enterprises increased by 3.1 percent which was by 1.5 points less than the plan had anticipated. The planned relation between the increase in labor productivity and increase in average wages was not maintained.

The average monthly wage of workers in the construction enterprises increased by 2.1 percent in comparison with 1978 (the state plan had anticipated a 2.5 percent increase) and amounted to Kcs 2,850.

# Transportation

Public freight transportation carried 620.3 million tons of goods which was by 1.1 percent more than in 1978. The state plan was fulfilled 98.2 percent.

Railroad transportation carried 283.5 million tons of goods which represented a 1.6 percent increase over the previous year. The planned railroad loading in tons was fulfilled 99.3 percent. A total of 237.3 million tons were loaded and the 1978 level was surpassed by 2.8 million tons.

The situation in railroad transportation was affected by a labor shortage in the key operating jobs, unevenness of loading and unloading, unsatisfactory structure of deliveries of spare parts for the repairs of basic assets as well as some shortcomings in the technical basis of railroads.

CSAD [Czechoslovak State Automobile Transportation] highway transportation carried 328.1 million tons of goods which was by 0.4 percent more than in 1978. The state plan was fulfilled 97.3 percent. The CSAD highway transportation volume was affected by long-distance freight shipments, lack of truck drivers and constantly rising percentage of rolling stock repairs caused mainly by lack of spare parts and repair capacities.

River transportation carried 8.8 million tons of goods which was by 11.3 percent more than in 1978. The coal shipments to the Chvalenice power plant significantly contributed to the increase in the freight transportation volume.

Public passenger transportation carried 2,447.7 million persons. The total transportation volume remained on the 1978 level. While CSAD carried 9.8 million persons more than in 1978, the decline in the number of passengers continued in CSD [Czechoslovak State Railroads].

The Prague subway carried 207.0 million passengers which was by 43.6 percent more than in 1978.

#### Communications

In communications, the telephone network further extended and the volume of long-distance and automatic international traffic increased. By construction of additional transmitters, the conditions for the reception of the television signal improved.

The number of telephones increased by 89,000 in 1979 including 25,000 for private subscribers. As of 31 December 1979, there were 3,071 telephones in operation including 1,102,000 in private households. There were 20.1 telephones per 100 inhabitants.

In the international telephone traffic, the capacity of automated Prague-Moscow telephone connection was expanded, the number of circuits in other international relations increased and the telephone connection of Cuba with some West European states was established through the CSSR. By introduction of automatic dialing with Spain, Portugal and Greece, and completion of technical and operating preparedness for automatic telephone connections with the remaining European states, the ratio of automatic international dialing reached 85 percent.

In radio communications, the reception of the second television program was made available for more listeners by the construction of new transmitters and secondary network of television converters. The Modry Kamen transmitter for the second television program and the Nove Mesto nad Vahom transmitter for both television programs were put into operation. In addition, the following transmitters of the second television program were put into operation:

Domazlice-Vranni Vrch; Trebic-Klucovska Hora; Ostrava-Hostalkovice; Jesenik-Praded. Moreover, the Lucenec transmitter and the temporary transmitter Olomouc-Radikov were put into operation ahead of schedule. As a result, 62 percent of the entire CSSR territory are now covered by the second television program.

#### Capital Investment

The volume of investment work and deliveries in the national economy (excluding the "Z" beautification campaign and construction carried out privately by the individuals) was by 1.6 percent bigger than in 1978. The deviations from the plan manifested themselves in the structure of fulfillment—the deliveries of machinery and equipment surpassed the volume specified by the state plan, but the planned dynamic development in construction work was not achieved.

The annual state plan of investment work and deliveries was fulfilled 99.7 percent, including construction work 95.7 percent and deliveries of machinery and equipment 105.3 percent.

As to the individual sectors, capital construction was primarily oriented to the development of the fuel-power basis, strengthening of the role of engineering, chemical industry and productions based on the domestic raw materials.

By concentrating supplier capacities on the key construction projects, the construction projects specified as mandatory tasks surpassed the planned volume of work and deliveries by 2.5 percent and the progress achieved on these projects was therefore much greater than in capital investments as a whole. Despite these achievements, however, some shortcomings persisted even in these projects which were reflected in the fact that they were not put into operation on schedule.

On the projects with the budget costs exceeding Kcs 2 million, the planned work and deliveries fell 5.4 percent short of the goal. On the other hand, on the projects with the budget costs below Kcs 2 million and in the deliveries of machinery and equipment not included in the budget costs the plan was surpassed by 8.5 percent.

The planned objectives were not achieved in controlling the volume of unfinished projects and in shortening the average deadlines set for the completion of construction projects.

In the course of 1979, the following capacities among others were put into operation: Jiri II mine--lst stage; nuclear power plant V-1 at Jaslovske Bohunice--the first 440 MW block; two aggregates 30 MW each in the Detmarovice power plant (airplane engines); 25 MW heat plant Bratislava; underground reservoir Lab--second stage; the Sverma Iron Works Podbrezova--push-broaching plant for pipes and auxiliary operations; the Slovak Power Engineering Plants Tlmace--workshop No 4 for separators; NHKG [Klement Gottwald New Metallurgical Works] Kuncice--central oxygen plant, first state; VZKG [Klement Gottwald Iron Works Vitkovice]--reconstruction of fire-brick plant; freeway No 1--sections Horice-Humpolec and Pavov-Rehorov.

Capital investments produced new basic assets in the value of Kcs 143 billion, that is by 8.6 percent more than in the previous year.

Science and Technology

Despite some positive results reflected particularly in the increased number of new products, we have still not succeeded in achieving the desirable change in the area of scientific and technological development by speeding up the practical application of achievements in the production sector.

Although the capacities of research and development base were concentrated on the solution of key problems, the state plan of technological development was not completely fulfilled. Of the total number of 472 state research and development tasks 84.5 percent were accomplished according to the plan. This represented an improvement over 1978.

In regard to the so-called implementation outputs, that is research tasks which were planned to be put into production and social practice in 1979, the plan was fulfilled 82.4 percent.

Among the major projects implemented in 1979 were for example: manufacture of hydraulic jet loom H-1000 of the new generation; manufacture of alitated (alitovane) electrodes; series production of asychronous engines; production of halls Pj 24 for industry; introduction of diffusion technology including the application of microalloy melts; introduction of technology of unipolar integrated circuits with MIS structure; starting the continuous production of large-size steel panels for grain silos with the capacity of 40 pieces per two shifts.

### Foreign Trade

The participation of the Czechoslovak economy in the international division of labor further intensified particularly through the development of production specialization and cooperation which contributed to mass production and execution of desirable structural changes. The overwhelming majority of our raw materials and energy needs were taken care of by the long-term trade agreements with the CEMA countries. In comparison with 1978, the commodity exchange with the CEMA member countries increased by 91. percent and specifically with the Soviet Union by 13.1 percent.

#### Growth Rate of Foreign Trade Turnover

	1979 in % of 1978	1979 in %	of 1978
Exports, total including:	110.3	Imports, total including:	111.2
to socialist countries	108 4	from socialist countries	109.9
to nonsocialist states	115.5	from nonsocialist states	115.0

The planned growth rates were generally adhered to both in exports and imports. Although the export of engineering products increased over the 1978 level, the planned volumes in export of engineering products were not met. The deficits in the export of engineering products were made up for by increased exports of products from other sectors.

The dynamics and results of foreign trade were significantly affected by the price trends on the foreign markets, particularly in relation to the non-socialist states.

# Living Standard

The total employment in the national economy was 7,205,000 in 1979, which was by 52,000 more than in 1978. More than 380,000 women were on maternity leave. A total of 6,540,000 persons worked in the socialist sector of the national economy (excluding JZD [unified agricultural cooperatives]) which was by one percent more than in 1978.

Employment in the nonproduction sectors increased more rapidly (by 1.8 percent) than in the production sectors (0.4 percent increase). The biggest increases in the labor force were in the school system, health care and domestic trade.

The average ratio of absence from work due to sickness or injury was 4.1 percent.

The total individual monetary incomes (including the interest on loans) amounted to Kcs 343.4 billion and increased by 3.6 percent in comparison with 1978. In comparison with the previous year, earned incomes increased by 3.6 percent and social incomes by 5.0 percent.

in accordance with the plan, the average nominal monthly wage of workers in the socialist sector of the national economy (excluding JZD) increased by 2.6 percent over the 1978 level and amounted to Kcs 2,580.

In connection with the already carried out revision of retirement benefits and family allowances, the social security benefits increased by 5.0 percent over the 1978 level. The number of retirement benefits' recipients reached 3,739,000; it increased by 40,000 in comparison with 1978. The average retirement benefits per month (from social security) increased to Kcs 1,160.

The total of individual monetary expenditures (including the interest on loans) increased by 3.9 percent from 1978 so that their increase was more rapid than the increase in monetary incomes. The increases in deposits and cash amounted to Kcs 7.4 billion in 1979 and the long-term deposits further increased.

In comparison with 1978, the retail trade turnover in all trade systems increased by 3.6 percent in 1979. A higher rate of growth was registered in the retail trade turnover by food items which accounted for 46.5 percent of the total retail trade turnover.

The demand for the basic food items was satisfied. Despite some difficulties, the demand for meat products was met. Due to the inadequate purchases of milk, milk products could not be supplied in the required structure and necessary quantities.

In regard to industrial goods, the demand continued to increase for the more expensive types of goods corresponding to the generally higher standard of housing and furnishings of households in terms of greater comfort, functional operation of households and aesthetic environment. Despite the increase in total shipments of goods to domestic trade over the 1978 level, certain products could not be supplied, because of the structure of shipments, in required quality, necessary quantity of fashion items and luxury goods, while the domestic manufacturers of some products failed to maintain the necessary rate of innovation and carry out changes in the existing assortment of goods. The supply of solid fuels to the population gradually improved in the course of the year.

The revisions of retail trade prices were reflected in the 1979 living costs index which increased by 3 percent in comparison with 1978. Simultaneously with the prices revisions in July 1979 several measures were enacted in the social area (increases in family allowances and retirement benefits).

In comparison with 1978, population's social consumption increased by 4.4 percent. In the form of social consumption, every inhabitant received on the average Kcs 8,472 as compared with Kcs 8,168 in 1978.

The kindergartens were attended by 666,000 children which represented 78.5 percent of all children of preschool age. Of all children completing primary education, 102,400 were placed in selective schools and 143,300 in regular secondary education. There were 376,000 day-time students at the gymnasiums, secondary trade and vocational schools, and 147,000 day-time students at universities and colleges.

The capacity of health care establishments increased to 186,900 beds including the hospitals with 117,700 beds. The number of inhabitants per physician was further reduced to 325.

In the area of culture among other things, approximately 7,000 book titles were published with the total of 83 million copies. The theater performances were attended by 9 million persons and movies by more than 81 million persons.

In housing construction, a total of 120,600 apartments were completed and the plan of apartment construction was fulfilled 93.0 percent. Of the total number of apartments completed, 29,200 apartments were constructed by the communities, 38,900 apartments by the cooperatives, 16,800 apartments by the enterprises and 35,700 apartments by the individuals. A total of 46,500 apartments were completed and made available for the recruitment and stabilization of the labor force (they were constructed either by the enterprises alone or by the combined effort of cooperatives and enterprises). The construction starts were made on 128,000 new apartments by the end of the year.

The population development registered a slight decline in some demographic indicators. The number of contracted marriages declined to 129,000 and 32,000 marriages were dissolved. There were 273,000 live-born children, that is by 6,000 less than in 1978. The mortality somewhat declined. The natural increase per 1,000 inhabitants was 6.5.

The CSSR population was 15,282,000 by the end of the year.

10501

CSO: 2400

### SSR ECONOMIC PLAN FULFILLMENT FOR 1979 ANNOUNCED

Bratislava PRAVDA in Slovak 26 Jan 80 p 3

[Report by the Slovak Statistical Office: "Effort Is Reflected in Implementation of Goals"]

[Text] bespite worsening conditions resulting from the complex external economic relations brought about by the increases in the prices of raw materials on the world markets, and unfavorable weather conditions for agricultural production last year, the economy in Slovakia further developed and the living standard of the population increased.

With the exception of crop production in agriculture, production in all basic production sectors increased; there was an increase in sales of goods to the population, particularly of durables and household furnishings (especially furniture); more than 45,000 modern apartments were completed; more funds were spent on social consumption and promotion of the development of the national economy in the future.

We have succeeded in overcoming the difficulties in most of the key sectors or at least in mitigating and reducing the unfavorable influences to a bearable degree by the self-sacrificing and initiative work of our workers as well as by the implementation of measures called for by the resolutions of the party organs--particularly of the resolution of the 12th plenary session of the CPCZ Central Committee of 4 and 5 December of 1978, and plenary session of the CPSL Central Committee in December 1978. The broad initiative of the working people in the consistent implementation of these measures developed after the meeting of the URO [Central Council of Trade Unions] presidium in January 1979 which directed the socialist completion of the working people to the fulfillment of the demanding plan targets.

The fulfillment of the key tasks of the state plan contributed to the implementation of goals of economic policy formulated by the 15th CPCZ Congress and CPSL Congress for the period of the Sixth Five-Year Plan.

## I. Production of Material Resources

# Industry

In industry, the dynamic production increase continued and made possible a 3.8 percent increase in the final deliveries at adjusted prices in comparison with 1978. In particular, there was a significant increase in deliveries of machinery and equipment for capital investment projects and exports to both socialist and nonsocialist states. The planned increase was not, however, achieved in domestic trade shipments, although they increased by more than Kcs 1.3 billion.

In comparison with 1978, the deliveries to the production sector of the CSSR national economy increased by 5.1 percent.

Inventories in industry increased by 6.8 percent. Due to to the larger deliveries and reduced consumption of solid fuels, the fuel supplies in the industrial enterprises were by more than 25 percent bigger and more favorable conditions were thus created for more even production during the 1979/1980 winter period.

The value of industrial production reached Kcs 170 billion in 1979. In comparison with 1978, its volume increased by 4.2 percent. Production increased particularly in heavy and general engineering, glass industry, production of building materials, production of electric power and garment industry.

On the other hand, production decreased in ferrous metallurgy because of reconstruction work and in the gas industry because of smaller consumption. Due to the slower increase in animal production for the market, delays in putting production capacities into operation particularly in industry and smaller consumption of electric power and gas, the value of industrial production was smaller than the plan had called for.

The following results were achieved in individual industrial sectors:

In the fuel industry, brown coal output amounted to 6 million tons. Due to the more difficult geological conditions, the output remained on the previous year's level. The plan of crude oil and natural gas production was surpassed.

The power sector fulfilled the plan of electric energy production 103.2 percent by increasing its production by 9.2 percent in comparison with 1978. The even fulfillment of the plan and the large increase in production of electric energy made possible the rapid running-in and reliable operation of nuclear power plant V-1 at Jaslovske Bohunice.

In metallurgy including ore mining, the total production volume increased by 0.5 percent in comparison with the previous year: by 1.2 percent in the mining and dressing of ores, by 4.3 percent in nonferrous metallurgy, while ferrous metallurgy remained virtually on the previous year's level. The general overhaul of furnace No 2 in the East Slovak Iron Works Kosice was completed ahead of schedule, whereby the production capacity of the entire industrial combine significantly increased.

As to the structure of industrial production, engineering industry strengthened its position and its share in total production increased to 24.2 percent. Engineering production as a whole increased by 7.3 percent: there was an 8.8 percent production increase in heavy engineering and a 7 percent increase in general engineering. There was a significant increase in manufacture of cars and pick-up trucks, machinery and equipment for the textile industry, machinery for excavation, construction and highway work, and trucks.

The internal structural changes in the engineering industry were positively affected by the implementation of development programs which resulted in the increase by one sixth in commodity production in comparison with the previous year.

In accordance with the intentions of the plan, the dynamic growth of the chemical industry slowed down: the rubber industry increased production by 5 percent and processing of crude oil by 3.6 percent primarily because of bigger production of plastics and synthetic fibers. In the pulp-paper industry, increases were achieved in the production of cellulose from deciduous trees, paper and cardboard.

The total production volume in the consumer industry increased by 4.9 percent. Production rapidly increased in the sectors based on the processing of domestic raw materials, namely in the glass, woodworking and textile industries. Big increases were achieved particularly in the production of chipboard and laminated sawdust boards.

The production volume of building materials increased by 4.1 percent in comparison with 1978. The biggest increases were achieved in the manufacture of ceramic wall tiles, structural elements and magnesite clinker in steel-making.

In the food industry, significant increases were achieved particularly in the production of edible vegetable oils, canned meat, poultry, milk and beer.

In the effort to increase efficiency and quality of products, mandatory indicators were specified in accordance with the CSSR government resolution No 288/1978 for the industrial enterprises for deliveries and increasing production efficiency. A total of 136 enterprises fulfilled the plan in accordance with all mandatory indicators. The periodical evaluation of compliance with the mandatory indicators was reflected in the improved structure of deliveries for individual directions of production use.

Agriculture, Forestry and Water Management

The development of agricultural production was affected by the unfavorable weather conditions last year. Their adverse effect was reflected particularly in the harvest of grains, oil plants, some types of industrially processed products and gathering of sugar beet.

By the enacted measures and particularly with great effort of all agricultural workers, animal production was maintained on the existing level and the market supply was in fact slightly increased. While the reality of 1978 was not attained in gross agricultural production, the marketable agricultural production for the state funds increased by 2.8 percent.

The total grains crop amounted to 3.2 million tons which was less than in the previous year. A total of 882,000 tons of corn for grain were harvested whereby the plan was fulfilled. This was by 323,000 tons more than in the previous year.

Although the potato harvest was 125,000 tons and the sugar beet harvest 302,000 tons larger than in the previous year, the plan targets set for both products were not met. In the case of sugar beet, this was to a considerable extent caused by the losses incurred in harvesting.

Apart from the grain crops, the biggest production loss was registered in oil plants and particularly in winter rape where it amounted to 39,700 tons. This deficit could not be made up for in view of the lower yields of sun-flowers and poppy seeds per hectare. The total production of oil plants was by 27,400 tons smaller than in the previous year.

The crop of perennial fodder in terms of hay was by 1,271,000 tons bigger than in 1978. Due to the poor crop of apricots, peaches and strawberries, fruit production was by 7,000 tons smaller than in the previous year. The total vegetable crop, on the other hand, was bigger. Despite the above-the-average crop of tomatoes and cucumbers the plan target was not attained.

The state funds purchased 1.2 million tons of grains including corn which was 30,000 tons less than in the previous year. The delivery plan was fulfilled by 100.1 percent. The plan target set for the purchase of wheat was not met, but surpassed in the purchase of rye and barley. The potato purchases for the market amounted to 355,000 tons whereby the plan was fulfilled by 98.7 percent, and the sugar beet purchase amounted to 1,911,000 tons (77.4 percent of the plan target).

In an mal production of the socialist sector, the number of all principal types of domestic animals increased with the exception of sheep and hens. Cattle population increased by 40,000 head, including cows by 9,400, pigs by 46,000, sows by 3,200, and poultry by 430,000. The domestic animal herds in the private sector and with backyard farmers further declined.

For cows, milk production of 3,040 liters per year was achieved, which represented an 80 liter increase in milk production per cow in comparison with the previous year. This, together with the increase in the average number of cows resulted in a milk production increase of 65 million liters. The number of live-born calves increased by 9,900, but their mortality below 3 months of age remained at the previous year's level.

In fattening of cattle and pigs, the average daily weight increases remained on the previous year's level, while the live weight at the time of slaughter declined in the case of cattle and on the average increased in the case of hogs.

The market funds purchased a total of 477,000 tons of slaughter animals which was by 7,000 tons more than in the previous year, but less than the plan had called for. The purchase of poultry for slaughter amounted to 81,000 tons which was by 4,000 more than anticipated by the plan. Likewise, planned milk purchase were surpassed by 4.5 million liters. This represented an increase of 58 million liters compared to 1978.

Forestry fulfilled the tasks set for the output and deliveries of lumber. Mechanization of lumbering operations reached 93.2 percent, while the felling of trees and lumber handling were already completely mechanized.

In water management, drinking water supply increased by 20 percent in comparison with 1978 and amounted to 420 million cubic meters. The public water system supplied water to 62.1 percent of the population, and the ratio of the population residing in houses hooked up to the public sewer system increased to 39 percent.

# Building Industry

Apart from the positive aspects reflected particularly in the concentration of construction capacities on some priority projects and greater attention paid by the enterprises to the compliance with the qualitative indicators, there were also some shortcomings in the development of the building industry. The progress in construction work was uneven and the structure of work did not completely coincide with the plan intentions.

The demanding nature of the tasks was emphasized also by the mandatory indicators specified for the plan fulfillment by the CSSR government resolution No 288/78. A more favorable compliance was with the indicators aimed at the accomplishment of tasks on the mandatory and centrally evaluated construction projects and in actual capital investment construction. Most of the enterprises achieved also the targets set for the economic results. The volume of construction work, however, was not completely achieved on the projects with the budget costs exceeding Kcs 2 million, which are subject to regulation, and on the projects in the areas of concentrated construction.

According to the supplier contracts, the total volume of construction work reached Kcs 28.9 billion, whereby the plan was fulfilled 100.5 percent not only by the building industry, but also by the enterprises of the SSR Ministry of Construction, and the previous year's level was surpassed by 6.2 percent. The construction organizations supervised by the SSR Ministry of Construction achieved a 6.4 percent increase in construction work. As to the structure of construction work, there was slower progress in capital construction in which the plan was not fulfilled. A more rapid progress than anticipated by the plan was achieved in repairs and other work in which the annual plan was surpassed by 9.4 percent.

The construction organizations surpassed the plan targets on several projects to which priority was assigned. This particularly applied to the projects of the fuel-power complex such as the Orenburg-western border of the USSR crude oil pipeline, doubling of the transit gas pipeline and Konzorcium gas pipeline, where by carrying out construction work in the value of KCS 1,193 million the plan was surpassed by almost 20 percent. A very dynamic increase in construction work was achieved also in the projects for the engineering sector.

We have still not succeeded, however, in adequately concentrating the construction capacities on completing unfinished projects and avoiding interruptions in construction work.

The volume of construction work in comprehensive housing construction increased by 10.3 percent. Despite the relatively high dynamic increase particularly in the SSR capital of Bratislava, the plan targets were not completely met particularly in providing public utilities for completed housing construction.

#### Transportation

Public freight transportation carried 248.4 million tons of commodities and raw materials which was 2.7 percent more than in the previous year. Nevertheless, all demands for service were not met in the required structure and on schedule.

The volume of freight transfortation by railroad remained essentially on the previous year's level. The same is true of the trend in loading. Among the principal types of goods, the plan targets were met in loading of crude oil, tars and products from crude oil and ores. The planned volume was not reached in transportation of building materials.

The increase in commodity transportation over the previous year's level was achieved by CSAD [Czechoslovak State Automobile Transportation] highway freight transportation which carried 121.6 million tons of goods and increased the transportation volume by 5.2 percent, and by river freight transportation which surpassed the previous year's level by 3.3 percent on international and domestic routes.

### II. Basic Factors in Production Increase

Employment, Labor Productivity and Wages

The average employment in the socialist sector of the SSR national economy (excluding JRD [unified agricultural cooperatives]) reached 1,899,000. Women accounted for 44.5 percent of the entire labor force. A total of 107,000 women were on maternity and extended maternity leave. Employment increased by 34,400 or 2.0 percent which was in line with the plan. The labor force increased particularly in industry, trade and public catering sector and building industry, and among the nonproduction sectors in the school system and health care. The labor force increased by 12,300 in the centrally planned industry and by 2,800 in the building industry.

Labor productivity in industry increased by 2.4 percent and accounted for 56.4 percent of the production increase. In the building industry, labor productivity increased by 4.7 percent and accounted for more than 75 percent of the production increase. Nevertheless, the growth of labor productivity as well as its effect on the production increase fell short of the plan target in both sectors. This was due among other things also to the decline in the utilization of the working time by the blue-collar workers in both basic sectors.

The average monthly wage of workers in the socialist sector of the national economy increased by 2.6 percent over the previous year's level and amounted to Kcs 2,550. The average monthly wage in industry was Kcs 2,595 and Kcs 2,820 in the building industry. It increased somewhat more in industry than the plan had anticipated.

The effort of party, state and economic organs was backed by the further development of workers' initiative and pledges. Approximately 1,700,000 workers participated in the various forms of socialist competition who assumed 1,085,000 individual and 160,000 collective socialist pledges aimed at savings of fuels and energy, raw and industrial materials, and at increasing production efficiency and quality. The fulfillment of these pledges to a considerable extent eliminated the adverse impact of internal and external relations on our economy, but above all contributed to making up for the delay in the fulfillment of tasks which occurred at the beginning of the year.

## Capital Investment

In accordance with the goals of the Sixth Five-Year Plan, 2.1 percent more funds were invested for the promotion of the SSR economic growth than in 1978. The actual volume of work and deliveries according to the state plan (excluding the "Z" beautification campaign and construction carried out privately by the individuals) was by 3.1 percent larger than in 1978. The plan targets set for the deliveries of machinery and equipment were surpassed, but were not met in construction work. The fulfillment of tasks

varied according to the categories of projects. The planned volume of work and deliveries was generally reached on the mandatory construction projects. Work continued on schedule on the projects for the fuel-power basis, construction of the nuclear power plant at Jaslovske Bohunice, hydroelectric power plant Cierny Vah, and construction work successfully progressed also on the structures of the Gabcikovo-Nagymaros water works. The planned tasks were accomplished on the structures providing for the increased output of coal, gas reservoirs, compressor stations and lineal section of the transit natural gas pipeline.

The demanding general overhaul and reconstruction of large-capacity blast furnace in the East Slovak Iron Works was successfully completed as were other projects designed to expand and modernize operations in this enterprise. New capacities for production of pipes in the Sverma Iron Works at Podbrezova were put into operation. In the engineering industry, capital investment focused on the development production programs in the automobile industry, manufacture of bearings, electrical engineering and equipment for the nuclear power plants.

In agriculture, the planned tasks in capital investment were surpassed. Only the construction projects in the food industry somewhat lagged behind. In transportation, the capacity was increased of railroad lines on the so-called southern route Kosice-Zvolen-Trnava-Kuty, of the combined freeway-railroad bridge in Bratislava, other sections of freeways and reconstruction of highways in the higher categories.

Generally speaking, however, the plan targets were not met on the construction projects with the budget costs exceeding Kcs 2 million whose starts are subject to regulation and which are important for the structural changes in the national economy.

In the area of social consumption, investments increased by 2.6 percent over the 1978 level. They increased particularly in comprehensive housing construction, trade network, walth care establishments, in construction of schools and structures for inversement of living and working environment. In view of the considerable increase in demands for the development of these sectors, all capacities were not completed.

Capital investment of considerable volume was carried out in the SSR capital of Bratislava particularly in relation to the reconstruction of the transportation network, technically demanding projects in industry, cultural-social area and especially in new housing developments and their shopping centers and public utilities.

Last year there was still inadequate emphasis on the completion of unfinished projects and putting of production capacities into operation. The continuing increase in the scope of unfinished projects was not brought to a halt. Although in comparison with 1978, the volume of basic assets put into operation increased by 14 percent, the plan targets were not met. Among the major

projects designed for completion which were not finished was for example the reconstruction of the intersection at the Peace Square in Bratislava, construction of the gynecologic-pediatric clinic in Trnava, ming in Kremnica and other projects.

# Scientific-Technological Development

The number of research and development workers reached 47,000 and increased by 3.0 percent over the 1978 level. The qualification structure of workers as well as tool to man ratio improved.

The activity of the SSR research and development base concentrated on the solution of basic problems of further development of the national economy such as savings and more efficient utilization of fuels, energy, raw and industrial materials, new products and progressive technologies, and improvement of living environment.

In metallurgy and engineering, research concentrated on the more effective utilization of raw materials and particularly of those containing magnesite, chrome and aluminum. In the chemical and consumer industries, new products were developed as were progressive technologies of chemicals for the rubber industry, pesticides and admixtures to the lubricating oils. In the area of agriculture and food, research concentrated on further intensification and rationalization of crop production by more effective irrigation, on the application of chemical and biological emements in the nutrition and protection of plants, increasing the crop of bulk fodders, and on the application of the latest findings on a rational diet. In the building industry, the emphasis in research was on the system of light-weight prefabricated structural elements for civic and industrial construction projects.

The scientific research centers dealt with 141 tasks of the state plan of technological development. Approximately 71.2 percent of the planned number of implementation tasks of the state plan of technological development were solved.

The reserves exist in the rate and scope of production innovation, in the increase in quality and competitiveness of new export products. The value of new products accounted for 9.0 percent of the total value of commodities produced. Of the total number of new products examined by the state testing laboratories, 60 percent were included in the second quality category. Of the total number of new products, 8 percent of new products and 12 percent in terms of value had technical parameters comparable with the parameters of the top quality foreign-made products.

#### Foreign Trade

In foreign trade, cooperation with the socialist countries and particularly with the CEMA countries further intensified.

The foreign trade turnover achieved by the organizations and enterprises on the territory of the SSR increased by 14.0 percent, but the imports increased more rapidly than the exports. More than 60 percent of the foreign trade volume were effected with the socialist countries.

# Financial Management

The effort to make the production process more economical succeeded in reducing the costs of one Kcs of output by 0.5 percent, but the demanding target set by the state plan was not met.

The positive aspect of the development was the fact that the planned tasks were accomplished in the principal component—in the consumption of material whose share in one Kcs of output was reduced approximately by 0.75 percent which was more than the state plan had called for. The share of material costs was reduced in a similar percentage in comparison with the previous year. The target set for the reduction of wage and other personal expenditures, however, was not completely attained.

# III. Living and Cultural Standard

# Monetary Incomes and Expenditures

The total amount of monetary incomes of the SSR population reached Kcs 103 billion which represented a 4.8 percent increase over the previous year. A substantial part of incomes consisted of the earned incomes which increased by 4.1 percent in comparison with the preceding year. The social incomes due to the increases in the retirement benefits and family allowances increased by 6.3 percent.

The monetary expenditures of the population reached Kcs 100 billion and increased by 4.7 percent in comparison with 1978. Their major part represented the purchases of goods from the retail trade network of domestic trade which increased by Kcs 2.6 billion. Payments for various types of services increased by 7.3 percent. The increase in the deposits and cash of the population amounted to Kcs 3 billion.

#### Domestic Trade and Services

The retail trade turnover in the main trade systems reached Kcs 65 billion. It surpassed the plan target by 1.2 percent and increased by 4.3 percent in comparison with the preceding year.

In the food industry, the deliveries of basic food items were adequate. The consumer demand concentrated on the items with the higher protein and vitamin content. As a result, there was an increase in sales of poultry, fish, eggs, milk products, potatoes, fruit (including exotic fruit). The food consumption per capita increased and reached the level of the developed states. Its structure gradually improved. The annual consumption per capita was 73 kg of meat, 213 kg of milk and milk products, 329 eggs, 81 kg of vegetables and 44 kg of fruit.

The sale of industrial goods increased during the second half of the year due also to the increased deliveries of goods to the retail trade network. Due to the uneven deliveries as well as orientation of the demand to the technically and aesthetically more perfect products with better useful properties, the demand was not met for several types of durable goods in regard to which certain saturation was attained. There were 83 refrigerators and 90 television sets per 100 households. Almost every household had a washing machine. More than 50 percent of all households had 2-3 radio receivers. Every third household had a car.

In the area of tourism, our citizens undertook 5 million trips abroad primarily to the socialist countries. The Slovak Socialist Republic was visited by approximately 8 million foreign tourists.

The enterprise of local industry and producer cooperatives increased both the volume and assortment of certain services to the population last year. In comparision with the previous year, the receipts from the population increased by 5.2 percent and the deliveries to the domestic trade by 4.7 percent. Their structure was expanded by the innovation of products.

Public transportation carried 963 million passengers last year which was by 8 million more than in 1978. CSAD passenger transportation increased (by 11 million), while railroad transportation registered further decline.

In the communications sector, the output increased and in accordance with the plan further progress was made in the automation of local, long-distance and international telephone traffic. More than 35,000 telephones were added to the existing telephone network, including more than 10,000 for the private subscribers so that there was a total of 836,000 telephones by the end of the year.

#### Housing Construction

The existing number of apartments in the SSR was increased by 45,200 apartments completed last year whereby the state plan of housing construction was fulfilled 100.4 percent. The contracting construction organizations completed almost 31,000 apartments. In individual housing construction, more than 13,000 dwelling units were built by the private individuals. The building starts were made on more than 46,000 apartments, 34,000 of which will be built by the contracting construction organizations and the rest by self-help.

As in the previous years, housing construction proceeded at an uneven pace also in 1979.

## School System

The number of children attending the kindergartens increased to 220,000 which was almost 77 percent of the total number of children in the age of 3-5 years. The basic schools were attended by 666,000 students. In

comparison with the preceding year, their number decreased by 5,000 due to the simultaneous departure of the eighth and ninth grade students from the basic nine-year schools. The number of teaching shifts decreased by 8 percent. In comparison with 1978, the number of children and students fed in school cafeterias increased to 613,000 which represented 58 percent of all school children and students. There were 139,000 students at the gymnasiums, vocational and secondary trade schools, 37,000 of whom were admitted to the first grades. Approximately 44,000 workers were part-time students at the secondary schools. There were almost 55,000 day-time students at the universities and colleges, 13,402 of whom were admitted last year. Approximately 52.4 percent of the latter group were admitted to the technical colleges. In comparison with the previous year, the number of the newly admitted students increased by 6.5 percent and of those admitted to the technical schools by 8.1 percent. Approximately 18,000 workers were part-time students.

#### Culture

The first and the second program of Czechoslovak Television in Slovakia prepared a total of 6,349 hours of broadcasting 71.5 percent of which were broadcast in color (63 percent in the previous year). More than one-third of the broadcasting time was taken up by the second program. The programs produced exclusively for television took 58.8 percent of the broadcasting time. Slovak film production completed 211 films, 17 of which were feature-length (including television) films. The theater performances were attended by 1,864,000 persons and movies by 21,883,000 persons. In book production, 3,051 book titles were published with the total of 24 million copies. There were published 306 different periodicals and newspapers, including 12 dailies with the total circulation of 539 million.

#### Health Care

Health care of the population expanded and improved. The number of physicians' position increased by 4.4 percent and reached the number of 13,700. There were 317 inhabitants per physician by the end of the year. The absence from work due to sickness or injury slightly declined. The capacity of hospitals increased to 33,700 beds and in a health establishments to 10,300 beds. The number of places in dayt arseries increased to 38,621.

## Social Security

Almost Kcs 7 billion were spent on the health insurance benefits for workers and members of producer cooperatives which was by 7.1 percent more than in the previous year. In accordance with the task of improving the conditions for the population development, Kcs 4.8 billion were spent on support of families with children which was by 8.7 percent more than in 1978. Family allowances accounted for the largest part of the increase. In addition, expenditures on maternity benefits reached almost Kcs 352 million.

Almost Kcs 10.5 billion were expended on the retirement benefits which was by 7 percent more than in 1978. The increase was primarily due to the increase in retirement benefits which became effective 1 August 1979. The number of retirement benefits' recipients increased to more than one million. The average retirement benefit increased by 5 percent.

# Population Trend

The positive tendencies of the preceding years continued in 1979. Almost 44,000 marriages were contracted and 6,000 marriages were dissolved. Two hundred more children were born than in the previous year and the total number of live-born children reached 100,300 which was the largest number since 1952 and the third largest number of live-born children since 1945. Due to the decline in mortality, particularly in the mortality of infants and unweaned children, the natural population increase was higher and amounted to almost 53,000.

As of 1 January 1980, the Slovak Socialist Republic population was 4,964,000 including 2,522,000 women. At the present time, 32.5 percent of the entire CSSR population live on the territory of the SSR.

10501

CSO: 2400

## SOURCES OF MANPOWER IN SIXTH FIVE-YEAR PLAN DISCUSSED

Prague PRACE A MZDA in Czech No 12-13, 1979 pp 683-686

[Article by Dyna Tesarova, Federal Office of Statistics: "CSSR Labor in the First Three Years of Sixth Five-Year Plan"]

[Text] Certain new elements emerged in the development of sources of labor during the first 3 years of the Sixth Five-Year Plan, compared to the previous planning period.

Due to changes in the age structure of the CSSR population, the growth of its main component i.e. persons in their productive years, which includes men between 15 and 59 years of age and women between 15 and 54 years of age, dropped to a level of 52,000 persons (compared with the Fifth Five-Year Plan this represents an average shortfall of 15,000 persons per year). A considerable decline also occurred in the number of foreigners working in the CSSR (from 18,000 at the end of 1975 to 11,000 at the end of 1978). These losses which had a negative influence on the development of the overall level of CSSR labor, were partly redressed by the effects of the new law concerning retirement benefits which became effective on 1 January 1976: in spite of unfavorable demographic expectations (deformation of population development due to consequences of the World War I) the number of workers of post-productive age. (i.e. men 60 years of age or older and women 55 years of age or older) increased by 15,000 and reached the level of 625,000 persons by the end of 1978. During the first 3 years of the Sixth Five-Year Plan, the nation-wide manpower pool grew by an average of 55,000 workers per year (during the period of the Fifth Five-Year Plan the yearly increase was still 64,000 workers).

Table 1. Sources and Distribution of Manpower During the Sixth Five-Year Plan Years (Situation at the End of the Year)

Lhounted		1	1924		1974		1978 - 100,0	
t talls	(1)	(2) celkem	s toks beary	orikem	a toba feny	cellege	(4)	
Zdruje pracovnich sil v v 11s. conh (5) z toho: (6) pracujeri (darodnim lo daratvi a jednivm robo	uspo-	9126	4437	9290	1459	101,8	100,5	
14400 /MTH at tentation & tam.		6966	3169	7110	2231	102,1	102,6	
v % (8) ženy na materiské a dol	•	76,3	71,4	76,5	72,5	×	×	
telaké dorodene v tis, o		366	346	392	392	107.3	107.3	
F. 0	-30	4.0	8,3	4,2	5,8			
žáci a sčimenti v produ	kriw-		0,0		0,0	×	×	
nim věku v tis. osob	(10	481	263	506	276	105.3	104,9	
V * D	120	5,3	4.9	5.5	6.2	×	*	
učni v produktivnim vi	ku				-,-		_	
V tas. osob	11)	335	112	342	121	102,2	107.7	
V	44/	3,7	2,5	3.7	2.7	x	×	

### Key:

- 1. Indicator
- 2. Total
- 3. Including women
- 4. Women
- 5. Sources of manpower in the CSSR (in thousands)
- 6. Of which:
- 7. Workers in national economy with a single or principal job (in thousands)
- 8. In percent
- 9. Women on maternity or extended maternity leave (in thousands)
- 10. Pupils and students of productive age (in thousands)
- 11. Apprentices of productive age (in thousands)

Toward the end of 1978, the CSSR national economy had 9.29 million workers at its disposal some (of this number 4.459 million, i.e. 48 percent were women) which is an increase of 164,000 compared with the situation at the end of 1975 (see Table 1).

In spite of the slower growth of the sources of labor, a moderate increase in the economic utilization of manpower occured after 1975 (by 0.2 points). The number of workers in the CSSR national economy (workers holding a single or a principal job) increased during the first 3 years of the Sixth Five-Year Plan by 144,000 and had reached 7.11 million, i.e. 76.5 percent of all sources of labor by the end of 1978. In this period, but especially in 1976, another increase occurred in the number of women on normal or extended maternity leave. Similarly, from 1976 to 1978 there was also an increase in the number of persons being trained for future occupations (i.e. pupils, students and apprentices of productive age). This occurred in spite of the fact that after 1975 there was a decline in the total number of boys and girls in the age group when they are usually trained for future occupations (in 1978, there

were 130,000 fewer persons aged 15 - 24 than in 1975). Furthermore, because of a modification in the CSSR educational system, the portion of the youth being trained for future occupations shifted to the age group of persons under 15 years of age (toward the end of 1975 there were 7,000 young people enrolled in schools of the second cycle while, by the end of 1978, the number was already 43,000 boys and girls). During the first 3 years of the Sixth Five-Year Plan most of the elements of the labor force stepped up their share of the total sources of labor (except for the non-working section of the population, whose numbers dropped by 56,000 since 1975).

In contrast to developments during the Fifth Five-Year Plan, the first 3 years of the Sixth Five-Year Plan saw a moderate increase in the population's economic activity which included people of productive, as well as post-productive age. In 1978, the portion of the population 15 to 59 years of age (men) and 15 to 54 years of age (women) who worked in the national economy was 74.8 percent (men 79.0 percent, women 70.2 percent) and of those aged 60 and 55 years respectively, or older, it was 21.8 percent (men 29.4 percent, women 17.9 percent). However, the degree of economic activity of all persons of productive age, including both sexes, did not reach the level of 1970.

Table 2. Economic Activity by Persons of Productive and Post-productive Age in the CSSR

Block	(1)	Pe	oduktivni të	Poproduktivni vek (3)			
(31, 18.)		4 yeathem	(5 Paul (	6 Juny	erikem	muti	Rany
1970		75,2	79.8	70,1	21.8	27,0	19.0
1975		74.6	79.6	69.2	21.3	28,7	16,3
1976		74.8	79,3	69,4	21.6	29,4	17.1
1977		74,8	79,3	69.8	21,2	28,4	17.3
1978		74,6	79,0	70.2	21,8	29.4	17.9

(7)\*) Pudli pravojené v produčtvním, resp. poproduktivním véku a jedjavan nebo hlavním saměstoanim (českosloveně) starní občáné) k celkovemu počtu obyvatel přecněné věkové skupiny

#### Key:

- 1. Year (31 Dec)
- 2. Productive age
- 3. Post-productive age
- 4. Total
- 5. Men
- 6. Women
- Participation by workers of productive and post-productive age with a single or principal job (Czechoslovak citizens) compared with the total population of a given age (in percenc)

The development of employment from 1976 to 1978 indicates that the slower growth of manpower sources has thus far had no immediate influence on the overall devleopment of employment in the CSSR.

At the end of 1978 a total of 7.22 million people worked in the CSSR national economy. Since 1975, their number has grown by 174,000, i.e. by 2.5 percent, which is about four fifths of the planned growth in employment for the national economy in all of the Sixth Five-Year Plan. During the first 3 years of the Sixth Five-Year Plan, the growth of employment was more rapid than foreseen by the state plan or during the preceding period.

Compared with the Fifth Five-Year Plan, the average yearly increase in employed workers in the CSSR national economy during the first 3 years of the Sixth Five-Year I in was highe. by 12,000 individuals, mainly because of a rapid increase in the number of workers with secondary employment (the statistics are influenced by the gradual inclusion of workers with insignificant work committments). During the first 3 years of the Sixth Five-Year Plan the number of workers holding two or more jobs increased by 30,000, which is 17.3 percent of the total increase in employment.

Table 3. Trends in the Number of Workers in the CSSR National Economy During the Years of the Fifth and Sixth Five-Year Plan.

		31, 12, (2)			Přírůstek (ubytek) (3) ·				
Ukazatel (1)		1			tech(4)	za 3 rokv (			
	1976	1975	1975	abe.	v *.	abs.	v *.		
Celkový počet pracu (6	5						1 .		
jících v národním hos- podařství v tis. osob	6864	7046	7220	182	2,7	174	2,5		
v tom pracovnici: (7) s jedinym nebo hlav-									
nım zaměstnáním (8) ve vedlejším pracov-	6783	6966	7110	183	2,7	144	2,1		
ním poměru (9) Z celkového počtu (10	81	80	110	1	-1,3	39	37,7		
pracovníků pracovníci – ve výrobní sféře									
abs. (11)	5412	5488	<b>5</b> 550	76	1.4	62	1,1		
V O	78.8	77,9	76,9	41,7	×	35,5	×		
- v nevýrobní sféře	14:0	1110	1070	100	- 0	110			
abs. (12)	1452	1558	1670	106 58.3	7,3	64.5	7.2 ×		

#### Key:

- 1. Indicator
- 2. 31 Dec
- 3. Increase (decrease)
- 4. During the years of the Fifth Five-Year Plan
- 5. During 3 years of the Sxith Five-Year Plan
- 6. Total number of workers in the national economy (in thousands)
- 7. Of which:
- 8. Workers with a single or principal job
- 9. Workers with a second job
- 10. Of the total number of workers
- 11. Workers in the production sector
- 12. Workers in the non-productive sector

The majority of workers in the CSSR national economy is employed in sectors of material production (76.9 percent of all workers by the end of 1978). However, the increase in employment from 1976 to 1978 occurred mainly in the non-productive sector where the number of workers increased by 112,000, which is roughly two thirds of the overall employment increase. The share of workers in the non-productive sector in total CSSR employment grew from 22.1 percent in 1975 to 23.1 percent in 1978.

As shown by Table 4 after 1975 the employment of women increased (by 74,000 or 2.3 percent) together with the total employment. The total increase in the employment of women in this period occured in the non-productive sector: the number of women working in the productive sector remained practically unchanged compared to 1975. From 1976 to 1978 women participated by 42.5 percent in the overall growth of employment. This is an increase of 1.7 points compared with the period of the Fifth Five-Year Plan. At the end of 1978, there was a slight decline in the number of women in the total number of workers in the CSSR.

Table 4. Number of Workers in the CSSR National Economy, According to Fields, During the Years of the Sixth Five-Year Plan -in thousands

(2)	3	1. 12. 197	$_{5}(2)$	31, 12, 1978			
Odvitta impodudo dospodarstvi	(3) (4)4 toho 20117			celkem	z toho żeny		
	Gerk-In	ahs. : v °		1	ahe.	▼ <sup>0</sup> / <sub>n</sub>	
Celkový počet pracujejch(5)	7046	3196	45,4	7220	3270	45,3	
Odvětví honotné výroby _ (6)	5448	2295	41.8	3550	2295	41.4	
zemidelstvi (7)	995	464	46,6	942	419	44,5	
_ lesnie:vi (8)	95	24	25,4	92	22	24,1	
primital (9).	2720	1122	41.3	2756	1124	40,8	
- stavebni vyroba (10)	617	79	12.9	632	85	13.4	
gor logická a projektová (11	D						
CINTIUST	71	27	38.7	84	32	38.6	
- doprava (12)	216	48	22.4	222	49	21.9	
victory obehod (13)	581	429	73.8	622	459	73.9	
Net vrobní odvětví (14)	1558	901	57.9	1670	975	58,4	
- doprava (15)	149	30	19.9	155	32	20.8	
- voda, výzkum a vývoj (16)	160	56	35.2	165	58	35.7	
školství (10) (17)	359	257	71.7	386	279	72.3	
zdravotnictvi (18)	269	212	78,6	286	224	78,2	
- správa, soudniciví, proku-				1	1		
kuratura, arbitráž (19)	111	59	53,8	116	66	55.3	

### Key:

- 1. Field of the National Economy
- 2. 31 Dec 75
- 3. Total
- 4. Including women
- 5. Total number of workers
- 6. Productive area
- 7. Agriculture
- 8. Forestry
- 9. Industry
- 10. Construction

- 11. Geologic and design activity
- 12. Transportation
- 13. Domestic trade
- 14. Non-productive sector
- 15. Transportation
- 16. Science, research and development
- 17. Education
- 18. Health
- Administration, judiciary, prosecution, arbitration

During the past 3 years of the Sixth Five-Year Plan the development of employment was characterized by continual shift of workers to the socialist sector (excluding JZD [Unified Agricultural Cooperatives]). By the end of 1975, a total of 6.312 million workers were employed in the socialist sector (i.e. 89.6 percent of all workers) and, by the end of 1978, this number had grown to 6.55 million, i.e. 90.7 percent of all the workers in the CSSR national economy. After 1975, there was a decline of 31,000 in the number of JZD workers, caused partly by normal retirement of older workers and partly by workers who transfered to other organizations of the socialist sector. In the first 3 years of the Sixth Five-Year Plan, the number of persons farming independently declined by 33,000, i.e. by more than a half of their total number at the end of 1975 (at the end of 1978, they represented only 0.5 percent of all the workers in the CSSR national economy).

We cannot anticipate an increase in manpower in the CSSR national economy during the remainder period of the Sixth Five-Year Plan. Bearing in mind the expected slow growth of manpower through 1980, we will have to rationally manage the labor force, and, better than has been done hitherto, ensure constant improvement in the effectivity of the social product by improved use of available working time by superior work organization, by greater demands and through systematic efforts to replace work with technology.

9454

CSO: 2400

'ZEMEDELSKE NOVINY' COMMENTS 'TO EACH ACCORDING TO TANGIBLE RESULTS'

AU292110 Prague ZEMEDELSKE NOVINY in Czech 24 Jan 80 p 2 AU

[Article by L. Pelouchova: "Wages--an Important Instrument; Remuneration Is Decided by Deeds"--passages between slantlines published in boldface]

[Excerpts] /Wage policy is an important factor that influences the fulfillment of this year's plan as well as the next 5-year plan. That is understandable, because to fully respect the principles of compensation means to differentiate consistently and justly-to value higher those contributing to the creation of goods and desirable social values. Unfortunately, that is not always the case. And, therefore, it will be necessary this year to establish uncompromisingly the socialist principle of compensation according to quantity, quality, social contribution and significance of every type of work. We must not permit any kind of work-be it good or bad--to be paid for equally./

In practice it is definitely not and will not be easy, because many short-comings—be they of a subjective or objective nature—are still hidden in the wage policy itself. Conomists will have to make—more than to date—an open distinction between quality and slovenly work and, even at the price of disagreeable personal circumstances, implement justly the compensation system. It is not only an organizational but also a moral-political question.

Ranking personnel often pursue the mistaken policy of wages averaging—the difference between the earnings of above average and workers of outstanding ability and less—than—average workers is small, and that, of course, influences the people's performance. Also, the tendency to pay at usual wage levels regardless of achieved work results is on the increase, while material responsibility—sanctions for poor quality work—are inadequately implemented.

The strain of the discrepancy in the need for and the availability of manpower also plays a role. The abundance of work opportunities, the nonutilization of fixed assets, the low use of shift work--all this causes
enterprises to try keep employees who do not feel any sense of responsibility
be it in technological or work discipline, or in the quality of production.
And, as it happens, those employees are usually the first ones--regardless
of their work performance--when it comes to claiming bonuses and other
benefits.

/The wage policy is, without a doubt, a very sensitive sphere. Precisely because of that, the following must remain in effect: to each according to specific results and social effect of his work, because he who wants to get ahead, must prove it by his deeds. It is only just that such persons be rewarded according to his work, even at the detriment of those who shy away from a decent days work./

CSO: 2400

INDUSTRIAL PROGRESS THROUGH LICENSING TRADING URGED

Prague HOSPODARSKE NOVINY in Czech 18 Jan 80 p 3

[Article by engr. Petr Spacek, Candidate of Sciences]

[Text] Licensing trading is an integral part of the foreign relations of every economically developed state. The buying and selling of licenses brings forth a considerable national economic effect. For example, the variety of quality-made goods increases, a saving in expenditures for imports from abroad is attained, and top level world technology is introduced. Therefore, it is necessary to utilize carefully the opportunities offered by licensing policy in the interest of accelerating scientific and technical development and of attaining the world level of production.

The economic development of developed countries depends more and more on the results of their ties within the international division of labor. In the period after World War II, it became the rule for the increase in foreign trade to exceed the rate of growth of the domestic systems. The relation between the development of links within the international division of labor and economic growth assumes a functional character—Soviet authors even state that for a one percent growth in the national income, there has to be a two percent growth in foreign trade of a country. We're not talking so much here about the development of "conventional" foreign trade based on branchwise specialization of countries divided into raw materials exporters and machinery exporters, as about the development of international specialization and cooperation in production and other so-called higher forms of economic cooperation.

# Licensing Trading

During the initial stage of the scientific and technical revolution, a high rate of economic growth is important, and as a final result, in order to increase the consumption fund, consideration is given to the intensive utilization of sources connected with speed and a broad range of application of the knowledge of scientific and technical progress into production. In this case, knowledge becomes not only a national, but also an international (direct) productive force. In this process, international

licensing trading has been carried out since the Fifties and has been developing at a more rapid rate than just plain commodity trade. The nature of the licenses, the majority which concern the products and the production technology of advanced high-technology fields such as electronics, electrical engineering, chemistry, machine building etc., show that their sales and purchases take place mainly among economically-developed countries. Just as in international specialization and cooperation in components and subassemblies, the successful realization of licensing requires partners at approximately the same technical and technological level of production.

About three-quarters of international licensing trade occurs between the most highly developed capitalist countries. An outstanding example is Japan, which, especially in the Fifties and Sixties allocated considerable funds for the purchasing of licenses and based its technical and economic upsurge on this factor, to a certain degree. From the long-range aspect, the United States is the largest producer of licenses, however, but even this largest and wealthiest country does not find it worthwhile to conduct research and development of new products and technologies in all manufacturing fields: It is more efficient, therefore, to concentrate in selected fields and to depend upon purchasing licenses in the others.

At the present time, the development of new products and technology frequently begins in the field of basic research. Therefore, a large share of the licenses is purchased by smaller and medium-size enterprises, which do not possess sufficient resources for carrying out the necessary research programs.

The exchange of scientific and technical know-how between socialist countries took place at first in the form of mutual gratis exchange of technical documentation. Production methods, manufacturing papers, etc. were transmitted without compensation. This form also served as an aid to partner countries at a lower level of economic development, who were implementing production frequently without experience—at that time, it was an important tool in the process of equalizing the economic levels of the socialist countries. At the same time, the possibilities of purchasing licenses from capitalist countries were limited as a result of the policy of embargo. For example, the notorious American "Export Control Law" of 1949 aimed against trade with socialist countries, was amended in 1955 with a law forbidding the sale of patents and documentation materials to socialist states.

The process of socialist economic integration, the development of higher forms of economic cooperation, and the stress on the effectiveness of mutual relations also contains within itself the expansion of licensing trading, the development of which stems from the planned expansion of international specialization and cooperation in the fields of production, science, and technology, and the pooling of the efforts of the CEMA member

states concerned in scientific and technical work. This trend was spelled out in the Complex Program for the Further Intensification and Improvement of Cooperation and the Development of Socialist Economic Integration: the member states offer technical aid, and are realizing coordination, cooperation, and mutual advance in scientific research and planning and design work etc., and are transferring technical documents, samples, licenses, and other results, both gratis and for financial compensation.

### A Component of our Plans

At the Fifteenth CPCZ Congress which placed emphasis on the fact that the further development of our economics cannot be based on the practically exhausted extensive sources, but on intensive sources, the importance of licensing was stressed. The congress documents lay the basis for the activation of our licensing policy and the subsequent utilization of the results of world science and technology for the most effective possible application of human and material resources in the process of raising the technical and technological level of production. The direction of licensing policy is a component of the national economic plan, and funds for financing licenses purchased are allocated in the State plan for the development of science and technology.

From 1976 to 1978, we purchased about 60 licenses annually, in which case, one was on the average of about 1.5 million korunas (quoted at franco prices). The number of licenses reached 439 in 1978, for which we paid a total of 362.5 million korunas. The year before last, for example, we purchased the licensing rights to the manufacture of a complete compressor head, an air pressure regulator, and a reduction valve for the air brake of a vehicle motor (from the FRG), the production of acrylic acid through the oxidation of propylene (from Japan), and the production of semiautomatic equipment for casting fine electrical components for television receivers (from the GDR). Of licenses purchased earlier, among the most important are, for example, a method of evaporative cooling of blast furnaces (from the USSR), paint for painting strips (from Great Britain), the E 4-7A quality transducer, a so-called Q-meter (from the USSR, and a turbo-blower for diesel engines (from the FRG).

In 1978, we purchased the most licenses from the FRG (19), the GDR (15), and Switzerland (9). The FRG is our frequent partner in the purchasing of licenses for the chemical and machinery industries, and the GDR is our frequent partner for the electrical engineering industry. The purchase of licenses for the chemical industry takes place also from Holland and the USSR.

How We Use Them

In the economic organizations of centrally-managed industry, the share of output on the basis of licensing is 4.7 percent, and in organizations which

use the licenses, the figure is 13.8 percent of the total output of goods. We have to characterize this share as being low, which is caused also by the fact that a number of production organizations have not had the licenses purchased in past years implemented into production, mainly because of the lack of investment, material, and technological provisions for the production. The number of nonimplemented purchased licenses amounts to 5 percent of the total number. After these experiences, only those licensing items where investment and overall organizational preparation for their timely realization was proved were included in the license purchasing plan for 1978 and 1979. A prerequisite for inclusion in the plan is the complex explanation of the foreign exchange and koruna financing of both the purchase of licensing rights and the needed machinery and materials.

The relatively high foreign exchange requirement for the purchase of machinery and materials for the needs of the licensed production remains a problem. For example, the purchase of raw materials from capitalist countries that are vital for application of the license is roughly five times higher than the license payment alone. Also, the importation of machinery from capitalist states exceeds the license payment by severalfold, whereas in licenses purchased in socialist countries, the requirement for additional imports, especially machinery, is considerably lower. This depends, among other things, on the fact that the production structure of the CEMA member countries is similar, which is also true as far as the technical level of the basic productive resources is concerned. factors have to be taken into consideration in directing licensing policy and weighing its effectiveness. It is necessary to continue to aim mainly for the purchase of such licenses that either allow for production on existing machines, or the use of domestic raw materials. At times in the past, the material imports for the initial supplying of licensed products were recompensated even from funds allocated for the purchase of licenses. Today, this practice is at a minimum: sources released for import purposes serve for recompensation of imports required by licensing, i.e., planned foreign exchange funds for compensation of investment and noninvestment imports. On the other hand, sometimes, in the case of need for purchasing of licenses, still other sources than those allocated previously are used.

# Their Economic Advantage

The decisive share of production based on licensing is directed to the domestic market (the volume of sales for domestic purposes exceeds 20 billion korunas). The possibility of export of the production is usually limited in the purchase of a license--either quantitatively or territorially. Nevertheless, the foreign exchange revenue from the export of licensed products exceeds any and all foreign exchange payments connected with it. An outstanding contribution to the national economy, also comes from import-reducing nature of the production under license. This influence can be estimated at roughly 2 to 3 billion korunas' worth of foreign

exchange savings for imports from capitalist countries. According to the analyses conducted, for each foreign exchange koruna expended in connection with the purchase of licenses (fees, transportation of machinery, spare parts, raw materials, etc), the foreign exchange revenue from the export and from the import-reducing nature of production under license amounts to about two foreign exchange korunas.

Thus, the foreign exchange revenues from production under license also create a source for the purchase of new licenses. In 1978, 252 Czechoslovak licenses were used in foreign countries, from which flowed foreign exchange receipts of 54.3 million korunas. During the course of the year before last, we sold 33 licenses for 4.5 million korunas (in 1977 we obtained 14.8 million korunas for 39 licenses). As usual, we sold the most licenses to the GDR (14) and the FRG (5). Other licenses were routed to Switzerland, Poland, Yugoslavia (4 apiece), and the United States, Mongolia and Romania.

In 1978, for example, we sold licenses to Switzerland for the production of the Kontis multi-shed loom, to the GDR for the production of four-wire 4 x 63 Mp swing shears, a three-axle chassis for the 160 Mp passenger automobiles, etc. Of the licenses sold earlier, one can name the method of V-shaped cross rolling sold to the United States, the NE-SA 3A G11 automatic weighing machine sold to Japan, the self-setting molding pattern for steel foundries, an automatic arbor transducer, and a leveling machine for highway finish work sold to the GDR, gas-fired glass furnaces in the form of a melting trough to the FRG, etc.

In recent years, the structure of the purchase of licenses has improved in part—the share of machinery licenses has increased, which creates a certain latitude for innovation of production and technical progress, and indirectly, this brings about an increase in export capacity of the machinery industry. The purchase of licenses brings about a considerable national economic effect: the variety of high quality goods increases, a savings in the outlays for imports from abroad results, and the world technological level is implanted. The greatest savings are attained in the field of research and development work, in the acceleration of scientific and technical development, and in the achievement of production on the world level. Even the sales of licenses is economically advantageous—some sources bring about, in the final analysis, a ten—to—one advantage of the sale of licenses as compared to goods, especially if they are imported through the sale of machinery necessary for their production.

The possibilities offered by the licensing policy have to be utilized therefore. Attention must be paid to the selection of licenses from two standpoints: the assurance of their timely implementation and maximum utilization, the requirements for material supplies called for, the pre-requisites for the export of products produced under license, etc. On the other hand, in active licenses it is necessary to create the bases for having their sales linked to the material supplies.

Table 1. Survey of the Purchase and Payments for Licenses

		CSSR		CSR	SSR
	1976	1977	1978	1978	1978
Licenses purchased	58	56	63	48	15
Payments for new licenses (million krounas franco)	87.8	114.9	68.2	54.4	13.8
Total licenses used	405	432	439	328	111
Total payments for licenses (million korunas franco)	379.4	368.5	362.5	221.7	140.8
Import of machinery and other material supplies purchased during the course of the year at the same time as the licenses and are necessary for production under license (million korunas franco)	1,573	783	419	228	191
Total payments in connection with the purchase of licenses and production under same	1,952.4	1,151.5	731.5	449.7	331.8

Table 2. Utilization of Licenses

	Number of Of these licenses the number purchased not imple-		In percent	Share of output under license of total value of produced goods in organizations:		
	before 1978	mented on schedule		which use the licenses	of central managed industry	
CSSR	376	18	4.8	13.8%	4.7%	
Of this Federal cen- tral organs	171	10	5.8	11.9%	4.0%	
CSR central organs	147	7	4.8	12.5%	3.8%	
SSR central organs	58	1	1.7	21.3%	8.0%	

Table 3. Survey of Sales and Incoming Payments from Licenses

	1976	1977	1978	CSR 1978	SSR 1978
Newly-sold licenses	33	39	33	26	7
Receipts for newly-sold licenses in million koruna franco	9.6	14.8	4.5	3.3	1.2
Total licensing contracts concluded	253	246	252	225	27
Total receipts from licenses in million korunas franco	96.4	66.5	54.3	52.3	2.0

CSO: 2400

#### BELLES

NORTH MORAVIAN AGRICULTURAL SEMINAR -- An orientation towards quality and hard work and the discovery and utilization of [hidden] reserves-this is the direction outlined for the last year of the Sixth 5-Year Plan by agricultural workers in the North Moravian Region. This has been demonstrated at their regional seminar in Hlavnice in Opava District, which was attended by Milos Jakes, candidate member of the Presidium and secretary of the CPCZ Central Committee. Correspondent Pavel Smid ba telephoned us some of the ideas from his address at the seminar: [Smia; In his address he praised the results achieved by farmers in North Morav and the fact that the North Moravian Region is one of the few regions that a realistic chance of fulfilling tasks for the entire Sixth 5-Year line | He emphasized results in the production of milk and cereals. However, ne spoke about considerable reserves, which farmers have, and which are obvious when compared to agricultural enterprises working under similar conditions. In this respect he emphasized, above all, the strategic policy line--self-sufficiency in the production of foodstuffs--in which the decisive role must be played by large-scale agricultural production--we can say everyone who works in agriculture. [Text] [LD052222 Prague Domestic Service in Czech 1730 GMT 5 Feb 80 LD]

CZECH ROAD TRAFFIC STATISTICS--On 31 December 1979, a total of 3.5 million motor vehicles were registered in the Czech lands [CSR] and about 4 million persons were holders of driver's licenses. In the course of 1979, a total of 82,040 accidents occurred on CSR roads, in which 1,059 persons lost their lives. [Prague MLADA FRONTA in Czech 31 Jan 80 p 2 AU]

NEW RESERVOIRS--A total of six new reservoirs holding about 170 million cubic meters of water will go into operation in the Czech lands by the end of 1980. The reservoirs will insure the supply of drinking water for the Gottwaldov and Brno areas, for the North Bohemian coal basin, and for South and Southwest Bohemia. [Prague ZEMEDELSKE NOVINY in Czech 31 Jan 80 p 6 AU]

AMELIORATION WORK IN MORAVIA--In 1979, North Moravian united farmers cooperatives drained 5,834 hectares of marshy land and carried out amelioration work on 9,961 hectares of insufficiently tilled land; they also built irrigation systems on 1,048 hectares. The average cost of an ameliorated hectare was KCS22,000--the lowest in the Czech lands. [Prague ZEMEDELSKE NOVINY in Czech 1 Feb 80 p 8 AU]

CSSR OFFICIAL IN ECUADOR-On 1 February, at the close of his stay in Ecuador, Jaroslav Jakubec, CSSR deputy minister of foreign trade, who led the Czechoslovak delegation at a session of the mixed Czechoslovak-Ecuadorean Commission for Trade, Economic and Scientific-technical Cooperation in Quito, was received by Jaime Raldos Aqvilera, the president of the Republic of Ecuador. The president of Ecuador expressed high appreciation for the advanced industrial tradition of the CSSR and confirmed-just as his Czechoslovak guest-the intention to develop all-round relations between the two countries. [Prague RUDE PRAVO in Czech 2 Fc 80 p 7 AU]

EXTRAORDINARY SATURDAY SHIFT--On Saturday, 2 February, the employees of the largest Czechoslovak magnesite plant in Lubenik worked extraordinary all-enterprise shifts to contribute to the fulfillment of the plant's large export tasks. During the extra shifts the miners extracted 1,500 tons of magnesite ore. In a round-the-clock operation the plant's processing section produced 650 tons of prefabricated base building material and 400 tons of loose heat-resistant material. [Bratislava PRAVDA in Slovak 4 Feb 80 p 2 AU]

APPLICATION OF SOVIET METHODS--Atotal of 192 collectives with 3,397 workers in the building industry, mining and glass industry are now working in the North Bohemian region according to the method of "brigade khozraschet method" originated by the Soviet innovator Zlobin. In the textile, cloching and leather goods industry, 4,803 women workers are working according to the arzeyeva method, which requires them to master several operations. Other methods used are the mazareva method of taking machinery under socialist care; and the korabelnikova method of utilizing saved material. More than 480 enterprises in the region have joined the socialist competition for saving fuel and energy. [AU012215 Prague RUDE PRAVO in Czech 30 Jan 80 p 3 AU]

CSO: 2400

## EFFECTS OF NEW PRODUCER PRICES ON FOREIGN TRADE NOTED

Budapest KULGAZDASAG in Hungarian No 1, Jan 80 pp 3-9

[Article by Peter Lorincze, department head, Ministry of Foreign Trade: "New Producer Prices From the Foreign Trade Point of View"]

[Text] We counter the worsening of the world economic environment and the effects on the terms of trade which are changing to our disadvantage only if production efficiency increases at a faster pace than the world market relations become worse in respect to Hungary. The new producer price system introduced on 1 January 1980 and the related price mechanism seek, among other things, to promote and constrain the emergence of this process. In a price system where the prices of raw and basic materials and of largevolume semiprocessed goods are continuously changing in accordance with foreign trade prices, it will be the same product that appears expensive or inexpensive, and thus the price system will be oriented according to material and energy savings. It also represents a step forward that in the branches of the processing industry that participate in international work specialization, the profitability of the enterprises in the competitive sphere depends on the judgment made by the foreign market on their products. new price mechanism stimulates production and foreign trade in their combined effort to increase our export prices to the greatest degree possible and exploit our available reserves in production and price work. To do this, however, we must also advance in our foreign-trade price work in accordance with the new requirements. We must analyze our selling prices in comparison with those competitors who have the highest price level, and we must in detail uncover those factors which cause our export prices to lag behind competition. The elimination of the possible differences is the joint task of production and foreign trade, which among other things requires closer cooperation and a mutually more effective flow of information.

In Hungary on 1 January 1980 we introduced a producer price system and realized a price mechanism which shapes domestic prices on the basis of nonruble foreign trade, as the price basis. With this step we essentially completed the process in the framework of which we adjusted our domestic producer prices to the situation that developed after the world-market price explosion. Consequently, after 1980 our "only" task will be to continue maintaining harmony in the existing starting prices.

As is well known, after the 1973-1974 world market-price explosion, not only the price levels changed radically on the world market but also--and this is more essential--the price ratios of certain product groups and products. We are not merely saying that in general the raw materials were evaluated upward to a large degree as compared to finished products, but that the evaluation of price groups in respect to one another (agricultural products and minerals) was modified significantly, and in fact certain price ratios also were changed for specific products interrelated during the production phase. Thus for example, rotein fodders and fertilizers became more valuable as compared to meat and wheat. The modified price ratios, of course, "rewrote" in broad scope the profitability conditions of certain producer activities, and they posed more difficult efficiency requirements on the development prospects of certain branches and sectors. But we must establish one fact: the new prices and price ratios have come to us as objective factors, we have no choice as to whether we shall acknowledge them or not.

If the domestic producer prices of a country with an open economy follow closely the price movements on the world markets, then the foreign exchange balance of that country and the cost calculations or achievement accounts of the enterprises, in the case of a given foreign trade transaction, will show the same evaluation: whatever the country found to be expensive in foreign currency, the consumer will also feel to be expensive, and vice versa the profit-earning export will be profitable also at the enterprise level. The greater, however, the division between the producer price system and the foreign market prices the more frequently there will be differences in the viewpoints of the enterprises and the national economy in respect to economic life. Without trying to be complete, we can conceive of the following instances.

--If the price of a product rises significantly on the world market, but the domestic producer price remains unchanged, then the consumer enterprise will continue to regard the commodity "as inexpensive." It may be that the demand for it will increase significantly, and thereby the foreign exchange spent on the product at the economic level will increase. In such a situation there is no incentive for material savings, the enterprise has no incentive to replace the rising product with another and similar product, or to modify the production structure in accordance with world-market price relations. If, however, the finished product has a low domestic price but is made of basic materials with a rising price trend on the world market, there is a great danger that the export price work "will be softened" because of the distorted price ratios.

--The danger is no less in the opposite situation when the domestic price of a product with a declining world market price remains stable. Then there will be no incentive to replace the processing of more expensive basic materials perhaps with the use of products that have a declining price. In this case, however, the calculation of finished products for export will show less economy than actually exists at the enterprise level.

--All these problems appear at the making of development decisions in an increasing degree when in preparing the project--although the domestic sales may be profitable--the foreign market price relations do not judge the activity to be revenue yielding.

The lack of harmony between domestic and world-market prices obviously caused fewer problems in the period before the world-market explosion, when the price ratios were stable, and the extent of the world-market price changes were for the most part a fraction of those at present within a given year or between two calendar years. Amid the present, rapidly changing world market conditions, it is obvious that the producer price system must also stimulate the reaction capability of Hungarian production and consumption to increase. As a consequence, in the case of raw materials that basically affect consumption we could not continue with the practice of maintaining prices that are stable for many years and having them change only in the framework of comprehensive branch price changes.

Today it is entirely clear that the unfavorable, to Hungary, price ratios which have developed since the price explosion are not only permanent but during the Sixth Five-Year Plan we must, according to the forecasts, continue to face disadvantageous world-market prices. (For example, according to prognoses, the price increase will be greater in the 1980's for minerals and energy sources than for agricultural products.) Under such circumstances only one way offers itself for the countering of the deterioration in the terms of trade: efficiency in domestic production must improve at a rate faster than the change in the world market price relations as they occur to our disadvantage. This reaction, of course will not wipe out the actual deterioration in the terms of trade but will merely reduce its effect. To help in the uncovering of reserves, it is necessary to have an appropriate economic environment for the exerting of efficiency improvement. present relations, the new price system is seeking to establish this environment by aluing the consumed raw and basic materials at the same level as at the world market, and in that sphere where it exports, or can export, it handles the whole issue as the foreign market does. Thus it remunerates that production with a higher profit which produces products that are more favorably marketable on the world market.

As a consequence, the incentive to savings will be of a more intensified extent in raw and basic materials, and the development of possibilities of enterprises manufacturing products judged favorably on the world market will be greater. Therefore, the new producer price changes and the new price mechanism will promote the realization of one of our most important economic policy goals, the restoration of the external equilibrium.

In the new price system the base for shaping the price is the capitalist, world-market price, or the nonruble-account foreign trade price. This is supported by the argument that the acquisition of the increment in important raw and basic materials can be conceived of as coming only from this

relation. It is worthwhile to point out also that we employ the world-market prices as the basis for price formation in trade calculated in transferable rubles with other CEMA countries. (As a consequence of the method of price formation, contractual prices, of course, follow the movement of world-market prices only slowly and quietly.)

I regard as especially important two characteristics of foreign trade prices as a price system based on an "external" criterion system. In the price system that existed before 1980, the more important raw and basic materials belonged to the official price forms, and thus the price change depended on official decisions, and this is what determined not only the degree of the price change but also the mode of execution. Under such circumstances, it happened in practice that the carrying out of certain price changes could not occur because the enterprises concerned, for various reasons, regarded it as "intolerable." Since it was the goal of the central economic policy to bring the enterprises closer in price policy to the world-market, certain enterprises—bearing in mind primarily the stability of their situation—protested this. From other points of view as well, the price changes were problematical and frequently it was the general profit position of the affected circle which determined whether the rise in basic materials could be passed on and to what extent.

The new price mechanism is creating an entirely different situation. Since the prices of raw and basic materials—excepting energy sources and pine sawn lumber—go into the free price form, and the producer price continuously follows the foreign trade price, the price change is not determined officially but derives from what happens on the foreign market. It follows from this that the price change cannot be a "bargain" matter either, and passing on also is merely a function of enterprise activity. To put it more exactly, a producer price increase which has occurred because of a rise in foreign—market basic material prices will obviously be passed on in the costs, and its recognition in the price, on the other hand, cannot be automatic in areas belonging to price formation that adjusts to world—market prices.

The concept of the "limitedness" of prices is the other sphere where the new price mechanism is also bringing important changes. The basic principle of price regulation prior to 1980 was that the production costs—if they were otherwise factual—were indisputable and should be recognized in the prices without any further ado assuming that the buyer was willing to pay. (Consdiering the advantage of the sellers on the domestic market, the recognition of the costs could cause no difficulties in practice, and the competition did not constrain the producers to accept loss prices.) The target of the regulation was to realize profit above the prime cost; the well-known order number 1022 regulated "unfair profit" and not "unfair prices."

The price mechanism which enters into operation on 1 January does not guarantee the atomatic further passing on of costs, only to the extent that they can be made acceptable on the foreign market. If further passing on

in exports is not accompanied by full success, then the consequences have to be borne at the cost of the enterprise's own profitability. Of course, this is also true the other way around: if an enterprise can realize in its export prices not only the increase that has taken place in basic materials but more, then its profit will grow and its development and wage-development possibilities will be better.

The regulation of price formation adjusting to foreign trade prices is based on the following three principles in the processing industry in that area where nonruble account export reaches 5 percent of domestic marketing:

1. The enterprise must calculate that profitability on the domestic marketing which it will attain over the longer range by way of nonruble account export;

2. but on the basis of the 7/1978 official price order, an enterprise may deviate from the calculated profitability decisively with respect to domestic market relations; and 3. the enterprise must, however, conduct a price policy in such a way that the change in the price level of domestic marketing is in harmony with the price level change measured in export forints over a long period of time. That is to say, the price level of domestic marketing may in general rise as the price level of export. If the price level of export measured in forints should fall, it is then necessary to moderate the price level of domestic marketing!

Of these three above-named rules, I believe that the third is the most important, because while it is possible to depart from the first two, there is no exemption that can be given from the "price limitation."

It does not require explaining that in a price system based on foreign trade prices, not only the role but also the responsibility of foreign trade price work is much greater than before. The new price system creates a much closer identity of interest than before between the producer and the foreign trade enterprise in the attainment of better export and import prices because the profitability of an enterprise's full marketing is dependent on foreign market prices.

In the following I should like to discuss several such situations in which, under the circumstances of the new price mechanism, the incentive will be much greater than before for the attainment of favorable prices. It is not my intention to make these examples concrete, for these circumstances are to be found in various branches. (The reader can provide the "substitutions" without any further difficulty.)

1. Let the basic situation be as follows: a certain enterprise is using first-class basic materials continuously for its production work--in the price mechanism it is all the same where the commodity actually derives from and it exports the products made therefrom but in such a way that a significant percentage is not first class. Under the new price mechanism the price increase of the consumed basic materials is rolled into the enterprise costs, while in export the registered price increase attained by the

standard-bearing competitors will not be possible. Consequently, while in theory there is a possibility of realizing on the world market the change in the raw material prices in finished product prices, the enterprise meanwhile cannot count on this, and it must bear the difference at the cost of its profitability. Under such circumstances an enterprise will in all certainty be strongly interested in reducing the ratio of non-first-class commodities in export.

- 2. We are informed by many sources that we could raise our export prices 10 to 15 percent in certain product categories if we delivered the quality undertaken in the contract and at the time appointed therein. In other cases, the buyer "calculates" the weakness of service into the purchase prices. Presumably, the new price mechanism will constrain us to acquire these "price reserves" for ourselves because by its measure we can also improve the profitability of domestic marketing.
- 3. It happens more than once that we will unjustifiably concentrate our sales of some items into a certain phase of the year, at which time we will enter on the market with a large volume of goods, and our buyers—knowing full well of our constrained situation—will buy our products at low prices. On other occasions, we will set the price of our products for an excessively long period of time; failure to carry out justified price changes means a price loss. Beginning in 1980, the above—mentioned practice will hardly pay, for while the export price remains unchanged, the consumed material prices can certainly increase, and sales that are profitable at first can easily lead to losses.

It clearly follows from the above-listed examples--and from similar ones which I will not discuss here--that under the conditions of the 1980 regulation there will be greater harmony among the producer and foreign trade enterprises in the improvement of price work, and the conditions for the improvement of foreign market prices will become more favorable.

A qualitative jump, however, can also be expected in requirements on foreign trade enterprises. These increased demands derive precisely from increased enterprise interest that is evident in the improvement of price work. I would like to emphasize that the requirements which emerged in 1980 on foreign trade price work cannot be regarded as entirely new, but we are simply speaking of the fact that under the conditions of the new price mechanism "the high-jump bar has been moved up a notch." It is also not our goal with the improvement of foreign trade price work to "meet the requirements" but obviously to attain more favorable export and import prices.

If we look back on what happened in the 1970's, it appears that the first "challenge" to foreign trade price work was represented by the world-market price explosion. Thereafter this was followed at most enterprises by the creation of the independent price department, the more orderly collection of price documentation, the deeper evaluation of price information, or the

development of a price-oriented, price-centered market policy. Formerly, under the world market situation which obtained at that time, prices did not represent a similarly serious factor. It was in 1973-1974 that a regulation was established like the successful order regarding tactical purchases.

In examining the developments in the period since the price explosion, it can be stated that foreign trade price work has undoubtedly developed a great deal. This is clear in that 1) a procedural order has developed at foreign trade enterprises which is related with price work, and the fact that the levels of decision making have been regulated; 2) price documentation supports the price development of volume-carrying products (but the systematization of these price documents and their level frequently varies not only by enterprise but also by product; 3) the sensitivity of foreign trade enterprises vis-a-vis the most favorable purchase and sale time periods has increased significantly. In the final analysis, our experiences show that in the export and import of conruble-account raw and basic materials we are trading at world market and major market prices. (This statement is also valid for products like wheat and corn which are defined by exchange quotations.) The general situation with processed products, on the other hand, is that although our export prices frequently and significantly exceed the price level of the socialist and developing competition, there is still a lag in respect to the competitors that have the highest price levels, for the most part the developed capitalist countries.

From all this it follows that some important things must be done. First of all, we must more accurately measure the difference between our export prices and the prices of the most developed, high-priced competition with the use of reliable price documentation. All this requires a change in outlook in our evaluation of our export prices: the base of comparability, the subject of comparison can be for us the highest price level.

If we compare our export prices with those of the competitor with the highest price level, it is obvious that we will have to ascribe the difference in part to objective factors. For example, we must regard as an objective price-formation factor our tariff disadvantage on a given market, for the attainable price level will of course be determined for us by our competitor who is burdened with the lowest tariff. It is the same with shipping costs that rise from Hungary's geographic location and our distance from the buyers' market. The price that can be attained on a given market will naturally be set by the seller who is located closest to the buyer and who is also otherwise competitive.

A departure that exceeds the foregoing, however, cannot be regarded as of objective character and, in the enterprise sphere, can be regarded also as reducible. I would add here that our buyers value the quality of products as a price formation factor as well as the observance of the deadline, the level of services, the technique and efficiency of our foreign trade work. The prices we can obtain also depend significantly on the quality of our market organization.

If with an analysis of price documentation, we can establish that extent of price difference which it is possible to eliminate, then it is desireable that foreign trade and producer enterprises work out a joint action program for this task. Of course, we cannot nourish illusions. If the difference between the price of the competitor with the highest price level and the Hungarian export price has existed for decades, this is not something that can be eliminated in one year. The narrowing of the "price gap" or its possible elimination is the continuous task of the price work in the next five-year plan, and is the joint responsibility of production and foreign trade.

For the furthering of this process we must also attain a quality change in the area of price information extended to producer enterprises. I use the expression "quality" consciously since I do not think there is a problem with the volume of the information. At present the producer and consumer enterprises are regularly receiving a tremendous volume of market and price information through different channels and in varying forms. In respect to foreign trade, the criticism is rather directed at the fact that the information is not sufficiently goal-oriented and evaluated, or that their rapid evaluation (which would be the condition of rapid business decisions) is not possible. There is certainly truth in the proclaimed views although something else belongs to a full picture. (For example, the enterprise which receives the information should have appropriate organizational facility for evaluating the information and on that basis make the necessarily rapid decision.) It would not be advisable to handle the flow of information as some kind of "one-way street." While it is fully obvious that under the new requirements foreign trade must provide a higher level of information, there is no doubt that it, too, can demand more information from the producer enterprises.

Under such circumstances where the consequence of properly chosen buying and selling points of time appear directly in enterprise profitability, the producer and consumer enterprises will more frequently demand also short-range price forecasts. This is particularly true of raw and basic material trade. (The regulation of tactical purchases in actually unchanged form will remain as in the earlier incentive system through 1980 as well.) We must clearly understand that given the trend of constantly rising material prices we can moderate the increasing burden on the economy if we can progressively achieve having the average of the Hungarian purchase prices (calculated on the same base) remain beyond the average exchange price for the given product. That is to say, we must employ the contracts which cover domestic needs at an appropriate point of time and in an appropriate relation.

The world market price development shows that in 1979 the clever buyers were able to achieve significant savings. For example, the quoted exchange prices for nonferrous metals fluctuated significantly even within a relatively short period of time. At the end of March the quoted price for 1 ton of lead on the metal exchange was 1,180 dollars per ton, while 6 weeks later the

price exceeded 1,400 dollars, and then gradually fell by the middle of November to 1,200 dollars. Significant movement was also observed in Chicago quotations for soy meal. Toward the end of February, the price per ton reached 200 dollars, by 1 May, on the other hand, a ton of the fodder could be purchased, over a 2 week period, for 188 dollars. Those who failed to buy at that time presumably regretted it because within 3 weeks the price jumped by 12 dollars. The above examples compare the weekly average for exchange quotations. It is of course obvious that there are significant differences in price calculations from day to day, even in one exchange day. Undoubtedly, our import price work would be significantly strengthened if our enterprises made bolder use of the deadline transactions of the exchange.

The new producer price mechanism is creating a new environment for production, foreign trade and official work alike. Obviously, a certain amount of time will have to pass before every one becomes familiar with and learns the new ingulation. It follows from this, of course, that in the "transition period" we shall also meet with phenomena of "childhood illnesses" coming from inexperience. I would include here the efforts of certain enterprises at abrupt price increases—now in 1980 with the introduction of a new price formation system—in one step to an unrealistic 30 to 40 percent.

Under normal circumstances a correction like this, in one step and with unrealistic strain on products in the processing industry, can only lead to the loss of an established circle of buyers and a tried-out market. It is in the interest of all of us to interpret correctly the tasks stemming from the producer price changes.

6691

CSO: 2500

### CENTRAL MANAGEMENT, ENTERPRISE INDEPENDENCE VIEWED

Budapest FIGYELO in Hungarian No 3, 16 Jan 80 p 8

[Article by Otto Lukacs: "Central Management, Enterprise Independence"]

[Text] "Central management must be made more efficient due to the increasing demands. The coordinated managing work of central and local organs of the national management must be strengthened. Careful utilization of the social means, prevailing of the common interest demand further development of the present system of control by the state and by society"—the 11th Congress of the Hungarian Socialist Workers' Party stated in its resolution (Kossuth Publishers, 1975; p 162).

The document entitled "The MSZMP Central Committee's Guidelines for the Party's 12th Congress" writes this way about these questions: "...it is necessary that central management as well as local independence become stronger" (PARTELET 1979 No 12, p 8 point 6). Further: "Simultaneous strengthening of the central management as well as of the independence and initiative-taking ability of the enterprises, cooperatives are fundamental tasks" (ibid, p 13 point 10).

Thus we can see that the party documents make it a goal to simultaneously implement two requirements: increasing the efficiency of central management and strengthening enterprise independence.

One of the important conditions for simultaneously and efficiently solving both tasks is to correctly and uniformly interpret the contents of central management and enterprise independence. Clarification of this is also necessary also from the viewpoint of clear assignment of responsibility. Who is responsible for what: what is "central management" responsible for, and what is the enterprise responsible for? Without giving at least an approximately correct, clear answer to these questions, the ability to take the initiative coupled with responsibility cannot be truly developed; but efficient control also cannot be accomplished without clarifying these questions.

Gyorgy Varga writes in his article entitled "Shadow Mechanisms" (FIGYELO 1979 No 49): "The fact is that even as early as at the beginning of the

1970's, but primarily in the last few years enterprise independence has often been sharply restricted by the practice of economic management: the degree of freedom of enterprise decisions concerning production, sales and development goals, but even the selection of investments was more and more limited." He continues this way: "In economically complicated, difficult time periods, the role of central management becomes particularly important, primarily in pointing out the direction, and in the correct selection of goals and normative means which aid in the adaptation of the enterprise itself to the circumstances. But economic management organs tended more to give orders to the enterprises, to inform them of 'expectations', etc... As a consequence of all these, the central decisionmaking system is again burdened by so many positions taken to coordinate topics and natural types of questions, a portion of which should be handled within the sphere of the enterprises; in the meanwhile the central organs are getting into a more difficult situation with respect to solving the fundamental strategic questions."

The quotes also indicate that the important goals concerning development of the economic management system (similar to those also included in the party's congressional guidelines published recently) were implemented in part because of various external and internal reasons. This is why the efficiency of central management has not improved sufficiently and enterprise independence and the ability to take the initiative has not become as strong as would be necessary.

It is undoubtedly rooted in the fact that some questions have not been clarified theoretically. Thus, among others, even today we do not interpret uniformly the content of central management guidelines which, and what kinds of organs or bodies direct and may direct centrally, and what in fact can and what should be managed centrally; what cannot be considered as central management, and what cannot be managed centrally.

Well, it is hardly possible to answer the above questions without detailed and thorough analysis, and the answers will also probably vary as a function of changes in the economic environment. Yet, I would like to outline a few ideas.

The highest level party forums provide the type of theoretical guidance for the economic policy on which important national decisions are made. The national organ of authority which makes the "central decisions" and which most comprehensively expresses the overall interests of society is the National Assembly. Besides this, the decrees, orders and resolutions of the Council of Ministers, the National Planning Office, the Committee of International Economic Relations [NGKB] or of the Interministerial Price and Product Marketing Committee [TATB] qualify as central decisions. The best experts of the subject area participate in making and preparing these decisions, thus here (within the limits of what is possible) for the most part they are able to take into consideration "national economic interests". Theoretically the opportunity exists to evaluate all the

necessary interrelationships and alternatives. It is at this level where the opportunity and need truly exist for developing the priorities of economic policy. I think that decisions of the functional organs made in agreement with the other functional organs can also be considered central decisions (and thus management). The National Planning Office, the Ministry of Finance, the Hungarian National Bank, the National Material and Price Control Office, and in certain questions the Ministry of Labor can also be listed among these.

It is clear that the participation of these organs is indispensible in all important matters. Added to what has been said above must be the fact in itself that although some organ, institution or committee qualifies as "central" it does not yet in itself qualify the decisions made by it (that is, from the viewpoint of whether these are good or bad decisions).

At all the other economic organs management divides into two parts. Management and the decision can be considered central when, in the performance of their function of authority, they comprehensively regulate certain functions (for example the industrial law questions of certain areas; industrial, professional, labor safety issues; energy regulations, consumer interest protection, permits issued by authorities, etc.); and it is a different thing again when they give orders (openly or in a concealed manner) to the enterprises which belong under their supervision. There are extremely many forms of these interferences: corrective actions, conferences, plan evaluations, position taking in professional associations, creating various committees and issuing directives through these, etc. These types of actions cannot be considered to be central decisions (central management), because due to its objective position, a supervisory organ is not able to review the entire national economy, and what is perhaps even more important is that these organizations are the bearers and representatives of partial interests deriving from their very existences. For example, no branch organ is able to decide whether it is most advantageous for the country to build a meat processing facility, a pharmaceutical factory, a hotel or an instrument factory. This is what the economists of the Hungarian Ship and Crane Factory writes in connection with "It is unnecessary and erroneous to present a management organ as if it created opinions by reviewing the entire national economy. It may be in agreement with the greater interests, but it may also deviate from them. Thus it is not justified to present the ministries as the absolute embodification of the national economy, in contrast with the enterprises." (Adam Angyal: "National Economic Evaluation of the Enterprises." VALOSAG, 1979 No 12, p 58).

But if the above noted interferences by these organs cannot be considered as part of central management, then how can they become stronger, since they are not in harmony with the laws which govern the enterprises and this is how the "Shadow Mechanism" comes into existence, which fundamentally hinders and will hinder new normative regulation, development of the new price mechanism, that is, those driving forces which lead the enterprises in the direction of efficiency, profitability, etc.

Thus, as I have already posed the question above: how can this non-central managing, decision making, interference become stronger? The essence—in my opinion—is hidden in the area of supervising authority.

One of the most important spheres of authority--specified in the statutes-of the supervisory organs (ministries, other organs of national authority, councils, etc.) is that of appointing and removing managers (directors and their deputies), setting their salaries, determining conditions for their bonuses and determining their bonuses, rewarding them, etc. Inasmuch as the supervisory organs have these rights--and at the present they do have them --, then in essence they have received and are receiving unlimited opportunities for everyday interference in the internal lives of the enterprises, since it is obvious that the enterprise managers will listen to the "boss". Unfortunately, experience shows that such interference in many places and in many cases is almost an everyday practice. In general not only the person who does the actual appointing-generally a high ranking person (deputy minister, vice chairman) practice it, but the entire apparatus -- acting in the name of the person making the appointment. The extent to which thy respect enterprise law is that the overwheiming majority of these interferences are not done in writing.

I would emphasize the following problems in connection with interferences by the supervisory organs:

- 1. In general the person taking the measure is unable to size up all the effects on the national economy, thus it is possible that (s)he causes greater damage than the apparent or possible benefit.
- 2. It is contrary to enterprise law, thus it not only not contributes to increasing enterprise independence but it also makes the jobs of enterprise managers, their acceptance of risks and market orientation uncertain.
- 3. The majority of the measures are quantitative in character, thus they can contradict and in many cases do contradict quality requirements, modernness, and efficiency. In some cases these measures are rigid, and too standardized to be able to conform with the necessary flexibility to meet changing market conditions.
- 4. They erode responsibility and make it questionable the extent supervisory organ and the extent enterprise management is responsible for the enterprise's operation. This creates the peculiar phenomenon that when things are not going well, the enterprise is blamed but at the same time they are also protected tooth-and-nail (for example by granting preferences).
- 5. As a consequence of the possibility of passing on the responsibility, control of the supervisory organs is made more uncertain. The implementation of every law, official decree, resolution must be controlled. This

is an important obligation of the supervisory organs. But the supervisory organs also have a unique control--different from that of the other organs -- , the so-called end-of-year evaluation, when the enterprise's work for the entire year is qualified, evaluated, analyzed, reviewing almost every facet of its activity. (There are similar but even more detailed examinations than this every two or three years, the so-called comprehensive evaluations). If we examine the control of the various organs, we find that in many cases those are the persons doing the controlling, evaluating and qualifying are also those who do the "managing" by interference which I classified as non-central management. If we compare the number of people involved in non-theoretical "managing" work by the organs which exercise supervision, with the number of enterprises which belong to this organ, it becomes evident even from this that a significant portion of the apparatus is sent "out" several times a week to some enterprise "patronized" by it to discuss, confer, to provide guidance. Thus taking into consideration the very many types of methods of interference explained above, it becomes obvious that many people are in part evaluating, examining, controlling, qualifying their very own work. Thus the control of the supervisory organs, which is designed to qualify the work of the enterprises and their managers becomes gray, cannot be objective and cannot definitely pose the question of responsibility.

In the above article I wanted to mentioned only a few thoughts, intended mostly as food for thought, from the topic area of the efficiency of central management and increasing enterprise independence.

8584

CSO: 2500

### SITUATION OF CONSTRUCTION MATERIAL INDUSTRY NOTED

Budapest FIGYELO in Hungarian No 3, 16 Jan 80 pp 1, 6

[Article by Dr Iren Puspoki: "Fluctuations in Supply and Demand"]

[Text] In 1978 the construction material industry represented 3.3 percent of the Hungarian industry's gross production, and for this it used 4.8 percent of employment and 6.3 percent of the fixed producing assets. From the statistical viewpoint perhaps the role the construction materials industry fulfills in the national economy is not significant, buy nothing proves better its importance than the fact that the public opinion pays extraordinary attention to its work. The construction industry's and the population's demand for the construction material industry's products is very great. Several studies and articles have already analyzed the way the relationship between supply and demand developed. The last time we could read about this was in the article by Andras Vertes, entitled "Shortage Psychosis (FIGYELO 1979, No 50). This article provides a picture of the characteristics of supply provided by the construction material industry, and by doing this it also provides a contribution to working out the Sixth Five-Year Plan for this branch.

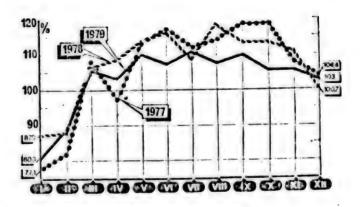
## Slow Development

During the national economy's Fifth Five-Year Plan a quite strenuous, 5.4 percent per year average growth rate (a total of 30 percent production growth) was projected for the construction material industry. However, as a consequence of changes in the operating conditions of the national economy, a smaller growth rate was expected in the annual plans for the medium-range plan projections (less and less each year). In 1976 growth of the construction material industry was moderate (3.4 percent). It did not even reach the planned level; but in the next two years it exceeded the plans (with 5.8 and 6.8 percent, respectively). As a consequence of construction activity exceeding the plan, limitation of the growth of domestic consumption, within this moderation of the investments took place. Thus the annual plan for 1979 projects only 2.9 percent growth of the construction material industry, with the (expected) fulfillment of which the construction material industry's production will increase by only 21 percent in the plan period's four years.

In agreement with the decreased task specified for last year, the growth rates of production in all branches of the construction material industry were smaller than in the previous two years (with the exception of the brick, shingle and fire resistant material industries, which have been stagnant for years.)

The curve characterizing the rate of production is determined fundamentally by the seasonal character of the construction material industry's production and market. In the months of January and February production is 10 to 20 percent lower than the average; a decreasing trend can also be observed in the months of November and December. This seasonality depends also on the opportunities to build inventories, because the present capacities do not make it possible to store the products produced by steady production rates at the times when they cannot be sold. With the development of the performance of the construction industry's work the seasonal fluctuations in the construction material industry's production can be decreased. The seasonality is also influenced by the "seasonal character" of transportation capacities in 1979 construction material industry production can be characterized with a development curve similar to those of previous years, but this time production decreased in the main season; thus the development curve followed a "flatter" path than in earlier years, and it also fluctuated less.

Figure 1: The construction material industry's gross monthly production as percentage of the previous year's average monthly gross production.



The growth rate decrease which occurred in 1979 occurred basically as the joint result of two diverging tendencies: construction material consumption decreased due to cutbacks in investments in the construction industry and by other enterprises, but demand by the population—even in spite of the increase in the retail price index—was extremely lively, beginning as early as the first months of the year. Basically the demand for construction materials is determined by the needs of the construction industry and other state—operated users; even the increasing demand by the population did not make up for the vigorous decrease in investment demand.

In 1979 the construction material industry sold 85 percent of its production domestically, and 32 of this, that is, 9 percent more than in 1978 went to the wholesale and retail trades. But domestic trade sold much more than this in a number of construction materials, due to the increased demand by the population. For example, in July, 48.5 percent more wall materials, 44 percent more asbestos cement roofing materials were sold than during the same time period in 1978. Finished product inventories of demanded products decreased significantly in industry and commerce. The paradoxical situation occurred that even though investments decreased, and the rate of construction industry production slowed down, the population's demand for construction materials still could not be satisfied! To wit, a contradictory situation had developed: on the one hand, referring to the decrease in construction industry demands, a portion of the capacities remained unused, and on the other hand they were unable to satisfy the population's increased demand.

Within the general development trend, production of the individual products increased or decreased at various rates.

Fire brick production has been stagnating for about 10 years, and since 1977 it has decreased. Last year's production was 1.7 percent less than that of 1978. Among the brick types, mainly the production of small size, solid bricks made in the traditional brickyards have decreased. The main role in the decline of brick production is played by the fact that the construction industry enterprises—parallel with the changes in construction technology—are increasingly using other, more modern wall materials (in 1977 310 million bricks were sold to the construction industry, and 250 million in 1979). The decreasing production was in harmony with the construction industry demand, but at some locations and times the branch was unable to fulfill the population's demand for certain brick types.

Also playing a role in the decrease of brick production is that several mines have been exhausted and became obsolete. (Between 1977 and 1979, production ceased in 13 brickyards, and because of this the production of about 200 million small-size bricks was lost in the last three years.)

Reconstruction of brick production began in the 1970's (its outstanding stations are the glazed ceramics factory in Bataszek, the brickyard in Orbottyan, the brickyard in Pilisborosjeno and the brickyard reconstruction in Matraderecske). In 1979 more than half (52 percent) of all bricks were produced in modern factories equipped with tunnel furnaces and modern material handling equipment. With the new technologies it has become possible to produce more efficiently hollow brick types with better thermal insulating properties. The ratio of these bricks is increasing each year. It was 76 percent of the total brick production in 1979. But a portion of the population still looks for the small-size, solid bricks.

As a consequence of moderation of the investments in 1979 in stone and gravel mining, the quantity of crushed stone produced increased by barely 1.6 percent as compared to 1978, and according to preliminary calculations gravel production decreased by 2 to 3 percent, while the ratio of better quality—classified, multiple chushed—crushed stone and gravel increased.

## Problems in Cement Supply

It is generally known that in 1970 almost as much cement had to be imported as half of the domestic production. Since then two new cement factories have been put into operation (the one in Beremend and the one in Hejocsaba) in order to improve the supply, and in 1979 the newest cement factory (in Belapatfalva) also began trial production, and is expected to be put in full production in 1980. Cement production in 1979 exceeded the 1970 level by 75 percent. The average annual rate of production growth was significant, even though it has shown a decreasing trend in the last 3 years. Even the increased production proved insufficient to fully satisfy the population's demand.

Distribution of the annual cement production by quarters is uneven. About 45 percent of the annual cement production is produced in the first and fourth quarters, and about 55 percent in the second and third quarters. The main reason for this is the limited cement storage capacity, which in the winter months places a limit on increasing production. To ease this, in recent years significant price discounts have been given to the domestic trade and to those community distributors which accept larger quantities of cement than in the previous year. In certain time periods the lack of additive materials hindered the growth of production. Due to difficulties in obtaining cinder for example in 1978 they were forced to produce cements with higher clinker content than had been planned. At other times the lack of kraft paper hindered the sale of cement packaged in sacks. technical problems--occurring in the new factories--hindered production in the main season. Lack of transportation equipment has been a problem for years. Due to lack of schedule in cement production, utilization of the expensive cement producing equipment is also unfavorable.

The technical level and productivity of cement production have also significantly increased. In the time period between 1970 and 1978 the per hour production of cement mills increased from 17.2 tons to 23.2 tons. The new plants operate with the less energy-demanding, so-called dry process, as a result of which the specific heat need of clinker firing has decreased to about three-fourths.

Today industry can better fulfill the needs for cement, but still an amount equal to about one-fifth or one-sixth of the production must be imported, and part of the import arrives late regularly, in the autumn months, increasing storage problems.

In 1979 about 7 percent less burnt lime was produced than in the previous year, and the quantity produced in 1978 also did not reach (by 0.4 percent) the previous year's level. The present lime producing equipment is obsolete. Production is going on under unfavorable conditions. Transportation of granular burnt lime also causes more problems because of unfavorable loading and unloading [conditions]. Selection of the products is unsatisfactory, the amount of modern powdered burnt lime production falls far short of the requirements, the quantity imported to improve the supply in 1978 for example was equal to 90 percent of the domestic production.

In the early 1970's the production of concrete elements did not follow the changing needs of the construction industry: the product structure was not in tune with the large panel and light structure construction needs of the prefabricated housing elements. The population was also not supplied with modern products. During the course of changing the product structure—partly by closing down some manufacturing locations and partly by regrouping the productions—the loss—causing production was decreased. A part of the production (for example some fence elements, roofing insert elements, concrete pipes, garden columns, sidewalk sections, shaped blocks for the mines) were regrouped from the major enterprise of this branch: the Concrete and Reinforced Concrete Industry Works to smaller, council—operated enterprises, and more modern products appeared on the construction market.

Under the influence of the changed production structure the composition of concrete and reinforced concrete production changed. Production of concrete products decreased, production of reinforced concrete products including the production of modern prestressed reinforced concrete products increased.

With the development of the housing culture the demand for ceramic construction items is increasing. Their production was dynamically increased during the 1970's. Their modern manufacturing technology reaches the international standards. The increasing production significantly contributed to decreasing the import of construction materials, but selection is still quite limited.

Conforming to the Development of the Housing Culture

In 1979 production of wall tiles exceeded the previous year's level by about 10 percent, and by 34 percent the amount produced in 1975. The new production lines produce a better quality, a greater selection and 40 percent colored design tiles. But a significant amount of imports are still needed to meet demand (it amounted in 1978 to 18 percent of the production). In recent years the manufacture of ceramic floor tiles has increased rapidly. (The 1978 production was 10 percent higher, 1979 production was 25 percent higher than the previous year's.) Expansion of selection is represented by the enameled products in contrast with the earlier plain stone material tiles.

Sheet glass production increased significantly in the mid-1970's with the start-up of the Sheet Glass Factory in Oroshaza and with the reconstruction of the Sheet Glass Factory in Salgotarjan. (Production in 1975 was more than 50 percent higher than in 1973.) However, production has hardly grown at all in recent years, and the main reason for this is the loss of production time due to furnace rebuildings, as well as hangups in the import of ammonia soda ash needed for production. In 1978 the production of extruded sheet glass increased by 5.9 percent, but the 1979 amount is 4.6 percent less than in the previous year. However, the present capacity represents an adequate base for the construction industry, for the population as well as for further processing (for example for safety and for thermal insulating glasses). The amount of imports, which in 1973 was still 90 percent of the domestic production, decreased significantly (in 1978 it was equivalent to 10 percent of the production). This served to expand the selection; at the same time almost one-third of the domestic production is exported.

# Profitability and Efficiency

Construction material industry supply conditions are influenced by the kind of productivity, efficiency and profitability trends which prevail in the branch. There is no opportunity here to go into an all-inclusive in-depth analysis but with the aid of one or two basic indices we can obtain a picture about this kind of situation in the construction material with respect to the industry.

In 1978 the construction material industry's production profits were 2.7 billion [forints] (10.2 percent of the income); but the net income generated here was more than twice this (5.9 billion Fts). However, this level of profitability—considering the committee means and the manpower—is below the industrial average.

[Table 1] Profitability Indices (Fts) In Terms of Means Committed and of Wages Paid Out

Year	Profit	in the	Net Incom	ne in the	Profit	in the	Net Incom	ne in the
	con-	industry	con-	industry	con-	industry	con-	industry
	struc-		struc-		struc-		struc-	
	tion material		tion material		tion material		tion material	
	industry		industry		industry		industry	
	per 100	Fts of	means comm	nitted	per 10	Fts of	wages paid	out
1976	6.81	10.44	14.50	20.39	83.37	103.63	177.46	202.34
1977	6.31	11.47	14.07	19.94	74.69	112.34	166.38	195.36
1978	6.61	10.33	14.41	19.22	75.36	102.92	164.34	191.58

The amount of the profit was among other things influenced by the relatively low profit margin of the construction material industry product prices, which was further decreased on the one hand by the material costs—due mainly to the

spiraling price changes—as well as by the increased ratio of other costs. Producer prices of major construction materials have maximums placed on them, and in spite of the periodic price adjustments the prices of a few basic construction materials were artificially low. (For example, the producer prices of fire bricks and roofing shingles without sales tax contained an 8 percent price subsidy in 1978 and 15 percent in 1979). Branch profits included much less subsidy than the industry's average. The amount of state subsidy was 14.8 percent in the construction material industry profits in 1976, 17.3 percent in 1977 and 15.0 percent in 1978. For the overwhelming part this was recieved by the fine ceramics and the polishing disc industries, and by the glass industry. At the same time the subsidy amount in industry as a whole was in excess (3.2 percent) of the 1976 profits, and even though this decreased in 1977 and in 1978, it still represented 43.3 percent and 40.9 percent, respectively.

The construction material industry is a branch with high demand for means, and thus the relative size of the development fund generated by the relatively small profit is doubly low: the value of means in terms of percentages was 2.3 in 1976, 2.6 in 1977 and 1.6 percent in 1978, the same for industry as a whole was 3.7, 8.3 and 7.5 percent respectively. So far the construction material industry was able to keep back the entire amortization funds to form the development funds, yet due to their small development funds the extent of the construction material industry enterprises deficits surpassed all other branches in 1979.

The amount of withholdings derived from the construction material industry is much higher (by 21 to 28 percent) than their profit volume. The largest items in this were the tax on profits and the increasing contribution for means committed, social security contributions and the payroll taxes, while the production and sales taxes characteristic for other branches of industry were insignificant.

Thus it is worth examining also the comprehensive profitability indices, which approximatively express the economic efficiency.

[Table 2] Comprehensive Profitability Indices (Ft)

	P	rofit in th	ne		Net	income	in the
Year	construction material industry		indust		construction material industry		industry
		per 100	Fts of	financial	resou	rces*	
1976	30.60		39.99	65.0	08		79.07
1977	27.84		45.60	62.	02		78.79
1978	28.44		41.22	62.	25		76.73

<sup>\*0.1</sup>x the committed value of means + 1.5x the amount of wages paid out

According to this the efficiency of the construction material industry resources deteriorated from 1976 to 1977, but in 1978 some improvement was seen—in contrast to the industrial average.

Increasing the economic efficiency is an important requirement also in the construction material industry. This must take place with the better utilization of the available resources, coupled with satisfying the demands at a higher level by developing a more economical product structure.

8584

CSO: 2500

### ENERGY CONSERVATION AT AGRICULTURAL ENTERPRISES NOTED

Budapest ENERGIAGAZDALKODAS in Hungarian No 11, Nov 79 pp 479-481

[Article by Dr Istvan Varga, mechanical engineer, National Energy Management Authority: "The Tasks of Agricultural Enterprises in Implementing the National Energy Conservation Program"]\*

[Text] Hungarian agriculture can take pride in results such as, for example, the 1977 data for wheat and corn production through the development attained since the achievement of socialist agriculture. That year, the world average for corn [production] was 2,952 tons per hectare, with 5.7 tons/he in the United States and 4,805 in Hungary. At the same time, the world average for wheat grown on 1 hectare was 1,664 tons, with 2,058 tons per hectare in the U.S. and 4,049 in Hungary. Since energetics played no small role in attaining these results, I would also like to cite a few statistics to characterize the connection.

Between 1960 and 1977, the production value of agriculture increased 6.9-fold, from 26 billion forints to a round 180 billion forints. Hauling power soared twelvefold, from 0.71 million horsepower to 8.6 million horsepower, and during the same period, the number of workers fell from 1,784,000 to 988,000. At the same time, energy consumption rose 3.6-fold from 4.2 pcal [measure of energy consumption; 1 Pcal =  $10^{12}$  kcal] to 15.3 pcal. Energy costs rose much more steeply, jumping from 0.8 billion forints to 9 billion forints.

In fact, one can characterize the energy consumption of Hungary as follows:

--constant increase (in specific terms and as a result of manpower reduction), next to which saturation is still far away since the specific energy costs of intensively managed farms stand above the national average;

<sup>\*</sup>Lecture given by the author at the statutory meeting of the Agricultural Section of the Scientific Association for Energy Management [ETE] on 18 May 1979.

- --efficiency appears through higher productivity;
- -- energy consumption consists mainly of fossil fuel oil products;
- --because of fast rising energy prices, specific costs are climbing steeply, yet in spite of this, energy costs account for only 4.5 percent of total expenditures (although it must be noted here that consumption in the form of indirect energy—as fertilizers and pesticides—represents a higher value than direct energy consumption);
- --finally, the breakdown of consumption according to purpose is also characteristic: in 1977, 27 percent of the energy was used by tractors, 12 percent by trucks, 23 percent by drying, 14 percent by animal keeping, 5 percent by greenhouses, 5 percent by industrial activity, and 14 percent by other purposes.

We must of course also examine energy consumption not only from the viewpoint of agriculture but also from that of the national economy, in the light of the country's general supply situation.

It is well known that as a result of the price explosion, prices have increased not only on the capitalist world market, but also for socialist imports. Initiatives encouraging energy conservation were successful in 1975-1976, and the rate of energy consumption growth was reduced. This process stopped, however, then in 1978 total energy consumption compared to 1977 rose by 6.7 percent instead of the planned 4 percent; of this increase, electric power consumption jumped 8.3 percent instead of the planned 6 percent. The latter occurrence is particularly serious when we know that in the electric power industry, 62,000 forints in the form of network investment and power plant construction must be spent for a 1 kilowatt low-voltage output, not even counting the investment needs of the energy carrier source.

The results of the rise in the cost of energy investments is that in the Sixth Five-Year Plan, more than 45 percent of our investments must be spent for energy purposes.

This enumeration also shows that the increase in effectiveness of energy consumption is not decided by the tractor driver, the stoker, or even by the energy expert alone. It is in vain that tractor and driver are good if agricultural works have been carried out at an inappropriate time, with poor organization and many empty runs, and even more if plants with unsatisfactory vitality and yield are sown in ill prepared soil, and when the crop is wasted by being transformed into animal albumen.

The success of energy rationalization does not decisively depend on whether or not to build somewhere a heat utilization system or whether or not to buy a new boiler but on the extent of our ability to introduce as soon as possible into the economy the results of the scientific-technical revolution. That is to say, beyond the work of the experts, energy management of the agricultural

branch also depends to an important extent on how much attention the labor organizing, agronomic and zootechnical experts are paying to the requirements of energy management, and how much care they devote to the complex harmonization of production and energy consumption, and to increase the efficiency of energy management for final production release.

The national economy always has an energy-related interest tied to the improvement of biological conditions, to varieties with more favorable genetic characteristics, to improved management of the soil's producing capacity, effective plant protection, high feed results, in short to high agricultural yields and to the reduction of specific energy consumption to be achieved through them.

The concrete tasks of production, I think, can be determined locally and I would not feel myself competent to explain the tasks to experts who know them better than I and practice them day after day. Yet if I do touch upon this, it is only with the thought of stressing certain connections.

The characteristic feature of last year's energy consumption increase is that it occurred predominantly in the non-regulated sector, that is among the population, in the communal branch, and in agriculture. Our inquiries also revealed that in 1977, electric heating appliances with an [total] output of 400 megawatt were put on the market.

It was in this situation that the Minister of Heavy Industry called upon the leaders of the associate authorities to limit the use of electric heating and take measures to eliminate overheating. The government compelled priority enterprises to prepare energy conservation plans and to put together the sixth five-year energy rationalization plan.

Further measures can also be expected, among them steps to foster conservation through economic means, primarily through price modifications. At the same time, stricter management conditions will also be introduced for a number of big consumers. Decrees are under preparation to limit electric heating and prevent cases of overheating. A proposal to step up energy rationalization activities is in the works. Sanction rights in force today are under scrutiny in the interest of a more effective enforcement of execution obligations.

These are the conditions which agricultural enterprises must also take into account. Thus in the given circumstances, the basic objective of agricultural energy conservation is to keep the pace of growth of energy consumption within limits which, on one hand, ensure the increase of production, the flexible performance of production tasks, and the preservation of the quality of the value's produced, and on the other hand, moderate the burdens arising from energy-related development by unearthing our resources for the national economy and increase its efficiency. This means tasks in production, both in its planning and decision preparatory phase, and in research and technical development.

Thus, for example, I stress the importance for the national economy of plant cultivation which consumes 30 percent of agriculture's total consumption in the form of fuel for tractors and combines, 12 percent for truck transport, and 20 percent for drying—close to 1 million tons of oil products. At the same time, one can also determine that there are plenty of possibilities for savings here, too, just like in every other sector of the national economy. For this reason, one must ensure more widely the diagnostic overhaul and adjustment of power machines, the harmony between work machine and power machine performances, the reduction of empty runs and trips, the on-the-spot filling up with fuel of big machines, and so on. The organization of transportation is also one of the areas where throughout the nation, the greatest reserves exist for saving energy—a task which does not even require any investments.

Produce drying also provides ample opportunities particularly because this technological operation is centralized in time and space. The current specific consumption—an average of 25 to 28 kilogram/ton of corn and 190 to 210 kilogram/ton of lucerne flour—can be reduced through expert and scrupulous operation to a value of 18 to 20 kilogram/ton for corn and 160 to 170 kilogram/ton for lucerne flour. In the case of drying installations, technical development must consider as its goal the reduction of the current nominal water evaporation from a 1,200 to 1,300 kcal/kilogram water thermal energy needs to a 1,000 to 1,100 kcal/kilogram water value.

Part of the heating installations, hot air blowers, and central heating boilers cannot be called adequate from an energy viewpoint because their purchase was determined not by good efficiency but by low price, that is to be more exact, by whether or not the necessary funds are available. But even the installations that can be called satisfactory are not operating in an adequate manner because of poorly selected performances, low loading conditions, maladjusted burning, and poor heat delivery conditions.

One must mention here the situation of maintenance. This is one of the most important tasks for energy experts. There is a need for measurements, record keeping, and controls and based on all of that, for maintenance performed at the right time. Instead of the general practice—if any at all—in one's own sphere of competence, the requirement of workmanlike service must be established. I know that we do not yet have today a satisfactory energy—related technical servicing network although the need exists, but has not manifested itself. With central assistance, we want to promote its development, to set up adequate regional organizations in the interest of heating methods, automatic instrumentation and chemical treatment servicing. At the same time, we wish to develop special organizations in coordination with the regional organs. I take this opportunity to call to your attention the county Chimney Sweeping and Heating Technique Enterprises which we would like to consider as bases.

I have already touched upon the occasional poor choice of the installations, and I must also mention here the question of selection. The great variety of equipment is not only an advantage but also a liability. In our domestic conditions, it is doubtful whether competition truly has a price reducing effect, but it is certain that the possibility for mainteannce and the supply of parts will be poorer, and the lack of know-how will also increase. This situation is particularly harmful in the case of imported equipment. The situation of the oil burners or, to tell the truth, the conditions in which hot air blowers are manufactured are in this respect characteristic. In 1978, for example, we can illustrate the manufacture of forced air furnaces with the following data: ten domestic manufacturers made 4,400 units of 19 different models with a total performance of 550 gcal/h—not exactly the mark of selective industrial policy.

In animal raising, the harmonization of heating and ventilation demands particular care, together with the expert use of automatic installations for the maximum utilization of animal heat production. As an illustration: 276 kilograms of heating oil per accommodation are needed annually in a breeding station to maintain a temperature of 24 degrees Celsius, but only 155 kilograms a year are needed for a temperature of 16 degrees Celsius. What is decisive here is the training of personnel, its system of interest and, of course, control and accountability.

I must draw attention to the increased sensitivity of the national economy in the area of electric power consumption. Greater care must therefore be taken of the rational limitation of peak-time needs, and of the use of energy through interposed storage. One must mention here—even if this is for the most part a technical development task—the importance of utilizing agricultural wastes. I think that as far as the future is concerned, this cannot be neglected either.

The planning of energy rationalization must be dealt with as a central question. This cannot be left out of the Sixth Five-Year Plan targets of any farsighted enterprise. The minimization of expenditures will be just as important a source of profit as the increase of production.

The significance of planning is growing. This is precisely why we must ask enterprises to be more demanding toward the energy-related content of the plans and to demand on accounting for its energy effectiveness because today's plans will determine the consumption of the future. The rise in energy prices is accompanied by a threat to the profitability of production unless we intervene without delay in the first phase of the investment process.

In the same vein, much greater strictness than until now must be exercised as far as the acceptance of installations is concerned. According to our experiences, the installations delivered do not even reach their nominally guaranteed performance. A blatant example is that of the boilers imported

from Denmark which cannot deliver even 80 percent of their guaranteed performance, yet not a single Hungarian buyer has complained about it to the Danish company. The central organs of our government and energy management want to give assistance also in this area to the energy users. Decree No. 3/1978 of the Ministry of Heavy Industry has guaranteed the energy-related authorities several relevant rights which aim to eliminate such occurrences. We want to have a say into the kind of appliance and installation manufacturers and foreign traders are supplying to consumers. We want to make sure that their energy efficiency stands at the highest level one can possibly demand. This also means, of course, that the degree of freedom in which selection takes place today will have to be restricted in some cases.

This is not everything, however, because even the best installations can operate poorly while being in use, and therefore greater attention than ever before must be paid to training and instruction, including the training of energy experts as well. On our part, we have planned the entire reexamination and modernization of the training and instruction related to energetics.

Last but not least, I would like to mention that Decree No. 8/1974 of the Ministry of Heavy Industry includes the tasks of the agricultural enterprises just as much as the tasks of the industrial ones. I am not sure whether the leaders of large agricultural farms are familiar with this decree or the fact that it altogether applies to them. I think that the study of this decree and its application to the conditions of large agricultural farms is an urgent task today. It is an urgent task also because, after many years of appeals urging energy conservation, the constraint of circumstances will also demand resolute measures. The organization, special conditions, and flexibility requirements of our agriculture always met with understanding and support on the part of energy management, but if we want to avoid compulsory measures, much more resolute and competent measures are needed on the part of agriculture as well.

In cooperation to this effect, not only the central organization and regional organs of energy management are at the disposal of agriculture, but also the forum at which we appeared today and the organization which provided room for it, namely the Energy Management Scientific Association.

It was only possible to outline this cooperation and to draw its framework here today. And perhaps still something else; to form a conscious esteem for energy. A greater esteem than that which can be expressed through economic means, something similar to the esteem in which the cooperative peasantry, the farmer holds the earth which every year renews life. Energy is also a treasure of the earth which, however, we can hardly renew. Its efficient use will increasingly become a determining criterion of the foundation of our well-being, conscious human nature, and rational society.

2153

CSO: 2500

### CONSTRUCTION MINISTRY OFFICIAL INTERVIEWED ON EXPORT POTENTIAL

Warsaw FUNDAMENTY in Polish No 50, 16 Dec 79 p 5

[Interview with Undersecretary of State (Ministry of Construction and Construction Materials Industry) Zdzislaw Grela: "Export--Also for the Country"]

[Text] [Question] The guidelines set down at the 8th Congress of the Polish United Workers Party stress the need for the pro-export development of our economy, including the intensification of construction export. But will this not threaten the full implementation of the housing program? The requirement included in the Congress Guidelines of shortening the period a citizen waits for an apartment made less attainable because of this?

[Answer] With complete responsibility I am able to state that the development of construction export does not take place at the expense of diminishing the potential necessary for implementing the housing program or any other urgent domestic task. Quite the opposite: this export is an important factor in the growth of this potential.

It is sufficient to observe the results of the domestic activity of our largest construction exporters. Their results are always better than the results of construction organizations and enterprises which do not conduct work abroad.

The reason for this is clear: enterprises which send their workers abroad do not encounter problems with staffing at a properly qualified level. Also, they do not experience significant problems with discipline or work organization. The condition of departure for foreign construction projects is, furthermore, the suitable training for good work domestically.

[Question] But not only people determine building capabilities of contemporary construction....

[Answer] Yes. It is even possible safely to say that machines operated by a high class of specialists decide. Therefore, the level of providing an enterprise with modern building equipment—from electrical tools to complicated mechanized equipment for the entire technical process—decides. Moreover, besides materials personnel qualifications decide the degree of building potential.

But the level of providing the construction industry with modern equipment depends upon the means which the national economy can appropriate for this purpose. Additional means can only come from construction export revenues.

And here lies the crux of the matter: enterprises expanding construction export obtain additional possibilities for purchasing construction equipment which can be used for domestic needs. In audition, foreign exchange allows them to select the most modern and productive equipment, thereby guaranteeing high-quality work. This, among other things, is determined by the impact of exports on increasing the possibilities of the domestic potential.

[Question] The Guidelines of the 8th Congress call for a growth in housing construction but also a reduction in industrial investment for the next five-year period. Does this indicate that the reduced share of the potential for industrial construction will be able to provide housing construction as well as export construction?

## [Answer] Certainly!

It is simply necessary to adapt oneself better and more elastically to situations and conditions in which we will take action. In this respect, conditions are changing not only in the country, but also on foreign markets. Today it is not enough to complete construction on time. Our clients are more and more demanding. Nowadays, construction performance must be of the highest quality in order to cope with increasing competition. Therefore, our domestic construction enterprises must prepare themselves for export work with ever greater versatility. Those enterprises which fail to achieve the necessary high level will not be able to compete for participation in export construction.

[Question] Material capabilities are likewise a barrier to the growth of housing construction. Can you explain the role they play in construction export?

[Answer] Materials for use in construction export are sold to the extent that they are available. Therefore, contracts currently negotiated by us do not include supplies of construction materials which are scarce in Poland. This includes steel, and in periods of no surplus, cement also. As a rule, this also applies to cables and timber.

However, when speaking of materials I must add something else. In the course of construction work abroad, we have the opportunity to export—within the framework of the value of finished installations—such materials which could not be exported individually, simply because no one would import them.

Occasionally, construction export also serves to promote the export of our construction equipment, since the type and quantity of equipment necessary for completing a project are specified in drawing up the contract, and its cost is an integral part of the sold installation's price. In most instances

this is domestic equipment. It was in just such a manner that the "entry" of Polish construction machines into the attractive Iraqi market first took place.

[Question] What is the current volume of Polish construction exports and who are the recipients?

[Answer] The volume of exports to particular countries is calculated by the value of sales. Altogether, the value of this year's construction exports, not counting exports to the Soviet Union, will total 1.5 billion foreign exchange zlotys, of which more than 70 percent from socialist countries, and the rest from free exchange.

Traditionally, our biggest recipient is Czechoslovakia, and then East Germany and Hungary. Exports to the Soviet Union, a large scale operation, have a somewhat different character.

For the most part contractors from Poland participate in the implementation of large investment ventures undertaken within the framework of interstate agreements and also within the framework of accounts for delivery of Soviet raw materials and, recently, electrical energy for our economy.

Among countries of the so-called second payments area, the recipients of our construction exports include Libya, Iraq, Iran, West Germany, Algeria, Yemen, Kuwait and Nigeria. Iraq and Libya, who account for more than two-thirds of the free exchange turnover, are our chief customers.

[Question] Is it possible to talk about Polish construction's export specialties?

[Answer] Of course. The construction of power facilities for which a huge, worldwide demand exists, is the first specialty. In this field we have considerable success. We are respected. Currently we are filling several contracts for the construction of power plants with Polish equipment entirely. This includes a turn-key plant in Czechoslovakia. Construction of power plants currently comprises 35 percent of the assignments completed by the "Budimex" agency.

We possess great experience in the construction of the most complicated power pipelines. We enjoy an excellent reputation. I think that in the near future we will begin to profit from this extensively.

Drainage work and construction of building materials plants and food industry plants also are included among our export specialties. We shall also export Polish factories for making house components.

In all, 65 percent of the orders which we are fulfilling consist of industrial construction, 22 percent specialized construction and 13 percent general construction. Although we accepted the principle that the object of export is not general construction, we would reverse it in the case of Libya because of important economic reasons for our country.

[Question] You mentioned that our constructors enjoy an excellent reputation abroad. Visiting Polish construction sites abroad and talking with representatives of investors who commissioned the projects, I, personally, encountered such an opinion. Both the quality of installations constructed by Poles and the tempo at which they were constructed evoked their real recognition.

It is well known that domestically there are significant troubles in this sphere. I do not believe that this is simply a matter of wages....

[Answer] Of course not. Relatively higher wages compensating for a trying separation from family and home is not the most important thing here. To be sure, it helps to preserve a high standard of labor discipline, but it does not predetermine the results which were achieved.

Foreign construction has at its disposal modern technological equipment and high-quality materials. Furthermore, it works with the most modern application of technology. Also, the work organization there is exemplary.

[Question] What conclusion for domestic consumption can be drawn from that?

[Answer] Experiences gained in foreign construction are valuable. After all, this is yet another positive aspect of the export activities of our construction people.

I have already mentioned that construction enterprises engaged in work abroad have much better domestic results. Not only additional equipment secured from the revelue for export helps to achieve this result, but better organization of work also contributes.

Valuable comparisons are also obtained from export construction. These are very useful for devising principles for work organization at domestic construction sites.

[Question] Poland is not only an exporter, but also imports construction services. Are these imports necessary? Indeed, on many occasions, foreign forms have engaged in work identical to that performed by Polish constructors abroad.

[Answer] We are opposed to the importation of construction. At this very instant our construction industry can build any kind of installation, even the most complicated. We know how to build quickly and according to present day requirements. We feel that the resources expended for the importation of construction should be, in part, earmarked for purchase abroad of appropriate materials and equipment. I emphasize in part, because of the entire expense of organizing and executing the work of many materials available in the country would place no burden on the foreign exchange balance.

On the basis of these assumptions, and taking into account the current capabilities of the building industry, the importation of construction-assembly work into our country ought to be eliminated.

[Question] A few days ago I read an interview with the director of the Warsaw "Orbis" hotels. He complained of a lack of willing people to undertake work connected with the major renovation of the "Bristol" Hotel. An announcement was also made about bringing in a foreign contractor.

[Answer] We have the following offer to all investors intending to purchase construction installations abroad. We will undertake the construction of every installation, guaranteeing prompt completion and a quality of work identical to the foreign proposal. Besides this, our price is 5-10 percent lower!

[Question] This is an interesting offer, perhaps also for "Orbis."

[Answer] The hotel "Poznan" in Poznan may serve as our showplace in the sphere of hotel building. We built it from materials almost exclusively of domestic origin.

[Question] From materials which I obtained before our conversation, it appears that all exports achieved to date by the Foreign Trade Agency of Construction BUDIMEX takes place on a cash basis. This is a considerable accomplishment. But on the world construction market more and more frequently purchases are made on credit. Is there no anxiety over this type of barrier?

[Answer] It is difficult to deny that the majority of transactions in world trade are negotiated on credit terms. This applies to construction export also. Incidentally, as a rule, cash transactions mean lower prices. As you rightly observed, we do not have any credit construction, and we realize that the country is not able to provide credit for construction exports. And this reduces our chances. Thus, we are considering the possibility of undertaking export ventures on the basis of credit negotiated in another country.

[Question] What kind of qualities are represented by Polish construction on world markets?

[Answer] Our great capital is our experience and the good opinion of our clients. The high evaluation of our activity in Libya and Iraq stands as an example. And, after all, a good position on the construction markets of Arab countries counts heavily today.

[Question] In any case, it helps in the fulfillment of increased tasks.

[Answer] We will make every effort to increase construction exports. This has additional significance for the economy since our construction activity abroad frequently opens the way-especially in developing countries-to exports of many Polish industrial articles.

[Wernicki] Thank you for the interview.

9005

CSO: 2600

### PROSPECTS FOR BOOSTING CROP PRODUCTION VIEWED

Warsaw NOWE DROGI in Polish No 12 Dec 79 pp 95-102

[Article by Stanislaw Nawrocki]

[Text] The Guidelines on Agriculture for the 8th Congress PZPR call attention, among other things, to a necessity of intensification of efforts directed toward the achievement of a self-sufficiency of the country in the production of food and agricultural raw materials. The achievement of this aim is fully feasible and can be attained in a relatively short time. One should first begin with the intensification of vegetable production. We can measure the productivity of the soil and degree of its utilization by agriculture by the output of the vegetable production.

However, as the country is developing socially and economically the main functions of the vegetable production are also being changed. They are being directly determined by the changes that occur in the standard, structure and quality of nutrition of the people. The economic causality of the progressive growth of the living standard and affluence of society is expressed by a rapid increase in the consumption of animal products and processed and refined vegetable products. This situation required therefore a corresponding constant adjustment of the scale and structure of vegetable production to raw-material requirements of agricultural and food industry and to requirements for fodder on which, in turn, the development of animal production depends. On the whole, our agriculture has recently made great advances in the production of raw materials for the rapidly developing processing industry. Here a vital problem is the great fodder deficit which has been increasing for many years and is directly connected with more rapid development of animal production than that of vegetable production. Therefore this problem should be solved primarily through the intensification of vegetable production to satisfy requirements for fodder.

In general, it is well known that the vegetable production depends on two groups of factors: natural conditions and organizational-technical-economical conditions. In practice, however, we are not always able to exploit their mutual interaction and to utilize the effect of those factors that at a given time can be relatively easily availed of.

Poland, compared to countries of Western Europe, has considerably worse natural conditions for cultivation of all the species of agricultural plants. Out of its available arable lands 45.7 percent are light soils formed on post-glacial sands which are already absent, for example, in West Germany. Only 26.1 percent of cultivated lands in Poland belong to a group of highest agricultural productivity, the so-called wheat complex.

Our climate too, compared to conditions in Western Europe, is characterized by lower temperatures during the vegetative period (more severe winters), smaller amounts and worse distribution of precipitation during the year and frequently repeated drought periods during the plant growing season. In general, even if we assume all other conditions to be identical, our crops would still be lower on the average by about 10-15 percent.

It is therefore understandable that the poorer natural conditions of our agriculture must be made up by other factors and in the first place by an abundance of modern means of production, correct field-crop production techniques, better organization or agriculture and its work, better, more adaptable species and variety of plants, and above all, by knowledge and involvement of farmers in farming and overall production processes of agriculture. The knowledge of these problems and in the first place of natural and technical-organizational conditions of agriculture, leads us to conclude that even though we do not have the relatively best natural conditions for the development of agricultural production in our country, nevertheless, we can produce food on a scale ensuring adequate nutrition of our entire population.

A study made by the Institute of Cultivation, Fertilization and Soil Science [IUNG], based on field experiments results from leading agricultural farms, concludes that given an adequately high level agricultural techniques and observance of principles of natural zoning our crop productivity can be running at a level of about 36-37 q/ha, which is higher than that assumed in the Guidelines for the 8th Congress PZPR.

By growing grain over an area somewhat larger than 8.5 million ha (about 57-60 percent of sown area) one could achieve a crop productivity of about 30 million tons annually. A rapid achievement of this level of crops is of essential importance for the present and future development of food economy of our country, because such grain crops will permit us to satisfy all our consumption requirements for processed grain and fodder of about 20 million tons to produce the necessary amount of meat.

Is this an achievable assumption? The results of mass field experimentation and of leading farms clearly suggest an affirmative answer. To achieve this goal, however, we will need to undertake a multidirectional action that would put in operation the majority of production possibilities of our agriculture.

First, we should aim at introducing certain changes in the existing crop structure, especially in PPGR [State Farm Enterprises], in the direction of the increase of the grain sown area.

Second, bring about a rapid increase and then complete satisfaction of requirements for basic means of production that limit the level of crops such as tractors, farming implements, mineral fertilizer, pesticides.

Third, approximate the level of crops obtained in practice to that being achieved in field experiments and in numerous leading agricultural farms (these crops most often exceed 40 q/ha).

Thus, in Poland there exists a too great divergence between what we obtain in experimentation and in leading agricultural farms and in a predominat majority of farms. This divergence applies to all species of plants, whereas, for example, in the case of rye, in practice often less than 40 percent of its crop per ha is harvested, compared to results achieved in the same year on experimental fields. It should be added that in field experiments no techniques are being used other than in practice, but on the other hand care is being taken to properly and adequately use all the means of production and correctly apply the broadly understood techniques of field-crop production. Hence we can simply conclude that if similar techniques were applied everywhere or in 90 percent of our fields under grain cultivation, then the difference between crops from experimental fields and from production fields would not be greater than 10-15 percent, resulting in crops of 37-38 q/ha.

Thus we come to a conviction that our present crops and, in general, the productivity of soil, measured by the production of biomass, generally depend primarily, on the level of agricultural techniques (cultivation of soil as a whole, rational crop rotation, selection of species and varieties of plants, rational fertilization and liming of soils, timing, norms and methods of sowing, good seeding material, protection and care of crops) and quality of field work. However, we cannot speak of applying good agricultural techniques and achieving high crop yields if the farmer lacks fertilizer, lime, good seeds, tools for soil cultivation, especially for presowing tillage, pesticides, and not infrequently machines as well. Modern agricultural techniques consist not only of working with simple farm implements but of the entire set of various techniques and methods that require the use of modern machines and expensive materials (mineral fertilizer, pesticides, retardants, desiccants and defoliants).

Some of the enumerated factors require special mention, for in the next years they will exercise decisive control over our crops. Among them I will name soil cultivation first of all. It is the oldest crop-producing factor, for this was practiced from the moment when man was compelled to sow and cultivate those species of plants which under natural conditions he could not continue to gather in sufficient amounts. In the era of virgin land agriculture, or fallow system of farming, and also partially in crop

rotation system of agriculture, that is until the beginning of fertilization, the tillage of soil was an essential condition for obtaining satisfactory crops. With the introduction, first of organic fertilization and then of the mineral, the importance of correctly performed tillage of soil seemingly decreased.

However, the fact of obtaining great increases in productivity thanks to the application of mineral fertilization cannot mean that we should neglect tilling operations. Soil cultivation together with a corresponding crop rotation, understood as a sui generis complex operation by a farmer, is responsible for high quality soil on which crops are always bigger irrespective of fertilization levels. For this reason proper cultivation of soil cannot be considered only as an action necessary for sowing particular plant species but one should remember that it is meant to help in a better utilization of its nutritive components and that it should provide the best conditions for their growth and development. This point has been likewise confirmed by recent experiments on the depth and frequency of plowing performed in experimental establishments of the IUNG. The results obtained show that shallow cultivation and the depth of plowing under crop rotation and replacement of deep plowings by shallow ones already in the first crop rotation causes a distinct drop in grain yield. These results also confirm the inexpediency under our conditions of shallowing and simplifying essential operations of soil cultivation.

The highest relative increase in productivity was achieved by our agriculture in the last decade by the application of liming and mineral fertilization of soils. However, the actually achieved average level of the use of agricultural lime and mineral fertilizers in our overall farming does not wholly cover its requirements compared with the increase of crops being planned. Especially high requirements for liming are being increased by the industrial emission into atmosphere of compounds which acidify soils. The results of investigations and experiments indicate that the liming of acidic soils is enhancing crop capacity from 2 to 4 q/ha depending on the cultivated plant and in the case of highly acidic soils it causes an increase in productivity of up to even 8 q/ha.

These and other results distinctly evidence high and even very high effectiveness of liming of our soils and at the same time justify a need for consistent implementation of the liming program. Besides, it should be noted that the effectiveness of mineral fertilization depends also on the reaction of soils. A further increase in the use of mineral fertilizers, especially on light soils, should be performed parallel to the process of deacidification of these soils. Meanwhile, the realization of the liming program has recently encountered considerable difficulties. A further continuation of the existing state of things threatens to slow down the growth of crops by at least 60 percent of the area under cultivation.

Effectiveness of mineral fertilization in our country is determined on the basis of rigorous experiments and economic-statistical investigations. The results obtained show that under our conditions the highest productivity

increase is being achieved with the use of up to 250 kg NPK/ha, although doses of about up to 300-350 kg NPK/ha are also profitable.

Our country, which in recent years was using about 190-195 kg NPK/ha, is not very far from countries with developed agriculture. Ahead of us are such countries as GDR with average use of 290, Netherlands 294, Czechoslovakia 236, and FRG, 232 kg NPK/ha.

However, if we take into consideration that our soils are poorer and the already mentioned high effectiveness of fertilization, we should relatively rapidly bring the consumption of fertilizers to a level provided in the Guidelines for the 8th Congress PZPR, that is to at least 230-250 kg NPK/ha, while at the same time improving the distribution and application techniques. At present, the low effectiveness of mineral fertilization in some farms results mainly from improper application or because they have already exceeded the optimum level of fertilization which amounts to about 300 kg NPK/ha for an average sowing structure. A higher dosage of fertilizer should be applied only when root-fodder crops or some industrial plants form a considerable part of the sowing structure.

In order to increase the effectiveness of fertilization and regulate its entire economy the IUNG has worked out a concept of programmed counseling. In the current year 400,000 ha of land of the PPGR were included by this counseling. In the near future it will cover the entire area of the cropland in the sector of socialized economy and also some individual farms. Thus, there is a real chance to enhance the effectiveness of fertilization and accelerate the process of increased productivity. This is conditioned, however, by a further increase in fertilizer supplies and the achievement of the already mentioned consumption level in the near future.

In addition to no cultivation-fertilization problems discussed, we should also mention an urgent need for setting in order the crop rotation economy, especially in a part of the PPGR, and the improvement of the overall seed economy.

The consistent use of correct crop rotation is an essential condition for the rational fertilization in farms, on a long-range basis, and makes it possible to apply all the good agricultural techniques, including primarily the truly execution of tilling and sowing operations. Recent years have provided many convincing proofs that timely sowing of winter and spring crops have made possible the achievement of high productivity in spite of unfavorable conditions.

There is likewise much to be done in the area of the production of good seeding material and supplying it to agriculture in proper time. One should, on a priority basis, strengthen organizationally seed farms and supply them with adequate equipment, and gradually pass to building seed reserves of winter crops in amounts making it possible to supply the northeast voivodships with seeds from a previous year's crop. Only then will it be really possible to supply seed in due time for the fall sowings.

The situation just described in the area of broadly conceived agricultural techniques points to an urgent need for its improvement and paying more attention than before to the quality of the overall agricultural operations and a better utilization of the biological potential of plants. At the present time the essential condition for progress in agriculture and in the development of food production is a skillful coordination of biological progress with technical progress in general. The organization of our agriculture and the level of its production, compared with overall development of the country, are at such a level where the minimum factor (factor on which depends a further increase of crops and of the entire production) is the more and more frequent occurrence of shortages in the means of production such as modern equipment, fertilizers and the whole chemical support base and means of transportation. Deficiencies in this area create a situation where in years of unfavorable weather conditions for agriculture (drought or excess of precipitation) because of tardiness of agricultural operations (want of machines), lack of fertilizers and inability of using pesticides for plant protection, want of retardants, crops to be poor, whereas in favorable years and the so-called "calamity" of a bumper crop, due to a want of a sufficient number of harvesting machines, a weak drying and storing base, losses in crops are high. As a result there is no great difference in the marketable production of our agriculture between the years, despite the statistical evidence of considerable diversities in crops. Thus, we can assume that failures which we experience in agricultural production result from a marked underinvestment of agriculture as a whole, including the agricultural and food industry associated with it, despite the considerable progress made in recent years. Therefore a need for further, consistent accelerated implementation of the investment program in agriculture and industries associated with it, and in agricultural food industry, results from the requirements and socioeconomic development of the entire country.

It is quite right to consider that in agriculture the plant is a producer. However, one should not be forgetting that the farmer, by means of a modern machinery, is creating favorable conditions for his life and thereby exerts influence on the level of its production. Such an understanding of the role of modern equipment does not dispense the farmer from thinking and from constantly adding to his professional knowledge and from a constant care for the quality of his endeavors. One should likewise remember that an improper use of great and costly mechanization or the poor effects of its use incommensurably increase production costs, and the import of costly fuels imposes upon the farmer the obligation of its effective use.

The adduced facts show a multifactor dependence of production processes in agriculture, their marked specificity and an urgent need for utilizing those reserves whose effectiveness, in view of limitations occurring in some means of production, is relatively high. Therefore, the implementation of production tasks of agriculture assumed in the Guidelines for the 8th Congress PZPR will require not only full coverage of the requirements of agriculture for the new, high-efficiency and reliable machines and

agricultural implements but also further active endeavor in utilizing all of the still existing possibilities in the area to increase productivity of cultivated plants. This should include in the first place:

- 1. enhancement of quality and timeliness of field work;
- 2. rational application of fertilizers;
- timely sowing;
- 4. good care and protection of sowings;
- ordering crop rotation and efficient organization of work on every agricultural farm.

All this should be taken care of respectively by: farmer, agronomist, manager of agricultural services, state farm manager, and industrial combine or association director.

A constant struggle must also be waged against formal attitude toward their duties by people directly engaged in agricultural work or for its benefit, the struggle against bureaucratization of agriculture and dilletantism connected with it, because agricultural production increases and development are not possible even with enormous investments without dedicated people. Agriculture had and will have in the future its distinct role. Its area, mass action and multifactor dependence cause that agriculture cannot have either a single universal technology or single general solution.

In modernizing our agriculture and increasing its productivity we should always bear in mind on the one hand its needs and on the other, we should strive to make better use of those possibilities that exist at present. In this context one can and one must do more than heretofore to improve the quality of our work aimed at raising the level of agricultural techniques and better organization of services and providing agriculture with necessary means of production.

1015

CSO: 2600

BONUS SYSTEM ENCOURAGES FARMERS TO CONSERVE FEED

Warsaw SZTANDAR MOLODYCH in Polish 14 Jan 80 p 4

[Article by Renata Leska]

[Text] Effective I January of this year, a system is being implemented to award bonuses for conserving feed used by those farmers raising livestock for food. In keeping with a resolution of the Council of Ministers, the farmer will receive the equivalent of 3 zlotys for each kilogram of concentrated feed not purchased.

A desire to encourage farmers to use their own feed more effectively lies at the base of this decision. For feed accounts for over 70 percent of the outlay for livestock production. Meanwhile, for several years the feed situation in agriculture has been worsening.

In recent years, the production of meat, milk, wool, and eggs has risen. But that increase was not attained solely with the help of feed from our fields. In 1970, we imported 2,709,000 tons of grain. In the current economic year, grain imports will hit 7.4 million tons. Obviously, that significantly encumbers our foreign currency reserves. Currently we spend about 1.3 billion dollars annually for imports of grain and feed. But aside from the financial possibilities, one must also calculate the transportation possibilities. Even if we were able to purchase more grain and feed, we would not have the means to transport it. Of the 7.4 million tons of imported grain, only 500,000 tons will be shipped by land.

Atmospheric conditions in recent years unfavorable for agriculture have influenced this increase of imports. But not exclusively. Production of livestock rose more rapidly than that of crops. The dispensing of livestock food also changed. Grain consumption increased: in 1970 agriculture used 1.86 kg of feed for one kilogram of livestock production, but already uses 2.5 kilograms in the past year.

Feed grains are undoubtedly easier to use, but only on the condition that there will be enough grain for the fields. But this has not happened. In fact, conversely there exists instead the tendency to diminish the role of grain in the planting structure.

Otviously, not everything depends on the farmers themselves. A rise in crop production, crop productivity per hectare to a large degree depends on proper fertilization, regulation of watering conditions and the perfection of agrotechnology. Meanwhile, in fertilization there has been an effective lack of development since 1975. In the economic year 1975/76, agriculture used 194 kilograms of NPK per hectare, but in 1978/79--189 kilograms. That resulted from a lack of artificial fertilizer. Nor was the plan for improving farmland ir past years realized. Moreover the improvement tasks for 1980 have not been extended.

The fact remains, however, that our agriculture does not always take advantage of the existing feed reserves. Some farms with the capability of livestock raising do not do so. In recent times, about 700,000 owners of individual farms have given up raising swine and cattle. In sum, in general there are no hogs on over 1,200,000 farms.

Faced with a lack of grain, it would be possible to successfully use potatoes. In the past year, we had a bumper crop of them. But not all were properly processed and preserved for feed. Farmers are not always interested in steaming potatoes and preparing their own silage. However, there are times—especially in "potato growing regions"—when farmers want to steam the potatoes, but the agricultural circle cooperatives lack fodder steamers. And after all, farmers grow very many potatoes. And indeed, they could significantly ease the feed shortage.

The system initiated of awarding bonuses for allocated feed not used should encourage farmers to produce their own feed in greater amounts than hitherto, seeking reserves in their own farms. And that will lead to greater profitability for livestock raising. For in reality those farmers who raise livestock with reliance on their own feed will receive more money for their sold animal. Thus, that is a good bonus. Undoubtedly it will be easier for farmers when the rural areas receive more and more quantities of high-protein raw materials necessary for producing their own feed. In th past year, agriculture received 873,000 tons of concentrates. Of this amount, we imported 125,000 tons of concentrates.

The system of subsidies for feed conservation involves not only the individual farmers. Indeed, especially in state and cooperative hog and cattle raising operations there is frequent waste of fodder. The state, agricultural producer cooperative, and collective farms will also be rewarded for the proper economizing of feed. Units specially formed for this objective in wojewodztwas and gminas will control the use of fodder per kilogram of raised animal in state farms, and also in hog-raising enterprises.

One and a half billion zloty have been earmarked as bonuses for farmers this year. The implementation of the possibility of paying equivalents in exchange for feed should result in a savings of about half a million tons of feed from state reserves in this year. This would boost the likelihood of feeding a greater number of animals, and the greater production of meat and milk.

However, the best principle must be wisely, properly and actually realized in practice. And in this instance, much will depend on the gmina authorities and agricultural service. The farmer must have the possibility of making a choice--money or feed. Reversing the situation--placing before him an accomplished fact (money instead of feed) could bring rather fatal consequences. And we must remember that the matter before us is not indifferent, for it means the assurance of a sufficient quantity of meat and dairy products in our shops.

9175

CSO: 2600

### BONUSES FOR INCREASING MILK DELIVERIES TO STATE

Bucharest BULETINUL OFICIAL in Romanian Part I No 8,28 Jan 80 p 2

[Text] The Council of State of the Socialist Republic of Romania decrees:

Article I--Article 4 of Decree No 410/1973 on the improvement of the contracting and purchasing system for animals, fowl, fish and eggs, as well as the modification of the retail prices of meat, meat products, fowl, fish and eggs, is amended and will have the following content:

"Article 4--Cooperative agricultural units which obtain an increase in the average yield per foddered cow and in the milk deliveries to the state supply, compared with the preceding year, and achieve the planned number of cows and heifers, will receive, in addition to the contracting prices in force, a bonus distributed as follows:

Increase in the Average Yield per Foddered Cow and in the Milk Deliveries to the State Supply	Bonus Given in Lei per Liter of Milk
50 to 100 liters	0.40
100 to 150 liters	0.50
More than 150 liters	0.70

The bonus will be given for the entire quantity of milk delivered."

Article II--The bonuses stipulated in Article I will also be given for milk deliveries to the state supply in 1979.

NICOLAE CEAUSESCU President of the Socialist Republic of Romania

Bucharest, 23 January 1980

No 23

### BRIEFS

BRANCH OF FRG BANK--Council of State Decree No 428 of 11 December 1979 approves the operation in the Socialist Republic of Romania of the branch of the joint West German-Romanian bank--Frankfurt-Bukarest Bank AG, Frankfurt/Main, Federal Republic of Germany. The branch will be able to carry out, with the Romanian Foreign Trade Bank, with the external branches of foreign banks established in Romania and with physical and juridical persons residing abroad, banking operations specific to commercial banks such as: receiving deposits and investments of funds, including those in the form of deposits, receiving and granting credits in hard currency, currency arbitration operations, commercial and noncommercial discount operations involving physical and juridical persons residing abroad and other operations, according to the provisions of the authorization for operation. Also, the branch will be able to execute banking operations with physical or juridical persons residing in the Socialist Republic of Romania and with foreign physical persons who are temporarily in the Socialist Republic of Romania, only through the intermediary of the Romanian Foreign Trade Bank. The branch will operate on the basis of and under the conditions of the authorization given by the National Bank of the Socialist Republic of Romania. [Text] [Bucharest BULETINUL OFICIAL in Romanian Part I No 8, 28 Jan 80 p 1]

BRANCH OF FRENCH BANK--Council of State Decree No 429 of 11 December 1979 approves the operation in the Socialist Republic of Romania of an external branch of the "Societe Generale" Bank of Paris. The branch will be able to carry out with the Romanian Foreign Trade Bank, with the external branches of foreign banks established in Romania, and with physical and juridical persons residing abroad, banking operations specific to commercial banks such as: receiving deposits and investments of funds, including those in the form of deposits, receiving and granting credits in hard currency, currency arbitration operations, commercial and noncommercial discount operations involving physical and juridical persons residing abroad and other operations, according to the provisions of the authorization for operation. Also, the branch will be able to execute banking

operations with physical or juridical persons residing in the Socialist Republic of Romania as well as with foreign physical persons who are temporarily in the Socialist Republic of Romania, only through the intermediary of the Romanian Foreign Trade Bank. The branch will operate on the basis of and under the conditions of the authorization given by the National Bank of the Socialist Republic of Romania. [Text] [Bucharest BULETINUL OFICIAL in Romanian Part I No 8, 28 Jan 80 p 2]

CSO: 2700

# FEC VICE PRESIDENT INTERVIEWED ON ECONOMY

Belgrade KOMUNIST in Serbo-Croatian 30 Dec 79 pp 13-14

[Interview with FEC Vice President Zvone Dragan by KOMUNIST editor Miroslav Koraksic: "Creation of a More Favorable Political Climate for a More Determined Turn for the Better in the Economy"; date and place not given]

[Text] In connection with the debate and adoption of the resolution on fulfillment of the medium-term plan in 1980 Zvone Dragan, vice president of the Federal Executive Council and member of the LCY Central Committee, answered questions put to him by our editor Miroslav Koraksic.

Question: Perhaps it would be good at the outset for you to briefly summarize the results of economic activity in the year which is just behind us.

Answer: First I will say that the results for last year, 1979, and those of the previous years of the current medium-term plan are independent and very complicated, so that it is difficult to single out one year. It is not legitimate to make this separation, since we would get a black-and-white picture which would not be realistic. Yet if we must say a few words about last year's results, then we can say that they are much more modest than what we planned and set forth in our development policy.

Certainly we are still maintaining a relatively high rate and pace of growth, but it is accompanied by very pronounced inflation, which in turn has brought a further deterioration of the balance of payments and a larger trade deficit. Thus we are paying a high price for that growth rate. To continue, the results are satisfactory in creation of new jobs and the rise of the standard of living, though in some sectors the limits imposed by income actually earned were exceeded. There were also results in capital investment, accompanied, of course, by problems because of the unfavorable composition of investment projects, which were not sufficiently kept in line with planning criteria and the actual needs of the Yugoslav economy. Capital investment projects are being funded with credit, both domestic and foreign, to an extreme degree, which increases the economy's dependence on domestic and foreign financial institutions.

In short, I think that we have just ended the most difficult year of this medium-term plan and the coming year, 1980, will by all appearances be one of the most difficult in the last decade.

No Alternative to Stabilization

Question: In view of what you have said what comment would you make on the expectations embodied in the planning projection for 1980?

Answer: The gist of the resolution is well-known by and large, since there has been quite a bit of talk about its content. Our expectations were not only realistic, but also necessary; that is, we need to make a radical turn toward stabilization policy. In fact this is the only alternative, since our problems and contradictions have accumulated, along with delays in the development of the socioeconomic relations of self-management, so that this year we must make a more radical move toward stabilization regardless of present international conditions or, perhaps, precisely because of those unfavorable conditions. Should we fail here in our resolution, we could find ourselves in a situation that is not only problematical, but is in fact critical, with the logical economic and sociopolitical consequences that derive therefrom.

Question: Please sketch out a few of the crucial areas for political, self-management and work efforts.

Answer: Globally, in the most general terms, as I have already said pretty much, these are stabilization of the economy and faster improvement of the socioeconomic relations of self-management. And stabilization, as we know, presupposes larger output of better quality, higher labor productivity and more efficient economic activity in general, as well as more optimum and thrifty distribution of income. This means that we must produce more and better products and must spend less, and that applies to all expenditure items. In our consumption and standard of living we cannot go on comparing ourselves to the most advanced countries if we want to have more stable conditions for economic activity and a gradual improvement of the standard of living in line with the real potential. In other words, first we have to create the new value and then form capital for a more rapid economic development and a faster improvement of living conditions.

That is one thing, and another is that we must improve the overall self-management organism and self-management relations more rapidly in all domains of economic activity and social reproduction. We must in fact be more consistent in enforcing the socioeconomic system and the arrangements of the system that have been adopted, we must move faster and more decisively in honoring the institution of social compacts and self-management accords and we must carry out those accords and compacts more consistently. In this area it is extremely important to strengthen the positions, rights and responsibilities of the republics and provinces not only for their own situation and within their own context, but also for the situation in the

Federation and for the efficient functioning of the Federation on the basis of the new system and its constitutional functions. Certainly it would not be good if we were to describe everything that comes from the state and its administration as unnecessary statism and as relics of the past, just as it would be wrong to believe that everything that comes from associated labor and the republics and provinces embodies only self-management and a strengthening of the socioeconomic relations of self-management. The state also must have clearly defined functions, as indeed it does, and by that I mean rights and obligations, which it must duly exercise and discharge. If we can work together in this way, then the positions and rights and responsibilities of the republics and provinces and especially of associated labor will gain strength more rapidly. To illustrate, if the flows of reproduction are disrupted to the extent that they cannot be effectively regulated through normal self-management channels, then certainly we cannot exclude intervention by the government, in view of its responsibility to associated labor for what it does. After all, it is better to prevent adverse consequences in good time than to confront them later in situations leaving no room to maneuver.

Influence of the Resolutions of the Presidium of the LCY Central Committee

Question: As far as the plan is concerned, the intentions you have set forth here are certainly beyond debate; they have by and large been accepted or probably will be accepted. Much the same was also the case in previous years. However, it seems we are becoming accustomed to nonful-fillment of plans. Are there any guarantees that next year we will adhere more closely to the plan?

Answer: That really is the topic of the day. We have indeed become accustomed to reiterate proclamations and resolutions and yet not carry them out, but to simply carry things over from one year to the next. Now, however, the objective situation is such as to "sober" and drive us to be more faithful to plans and agreements and development policy. This is, if I might use the expression, nothing more than an objective "pressure," since, as I have said, there is no alternative to stabilization of the economy.

I think, then, that we will have to speak more concretely about tasks and responsibility for nonfulfillment of plans and obligations, from the basic organization of associated labor to bodies and agencies in the republic, the province or the Federation.

Nor is it excluded that the plans, if in some respects they prove to be unrealistic, will have to be revised, supplemented and amended in accordance with the principle of continuous planning. That is better than for us all to know that there is something unrealistic in the plans that cannot be done. The essential thing in all of this is we have at the moment a favorable political climate for a more determined turn for the better in economic activity. Now is the time for people in the League of Communists and in society at large to examine and evaluate everyone's work and behavior against the program for economic stabilization and against the development of social relations.

Question: When you said that we have a more favorable political climate, probably you were thinking of the resolutions of the Presidium of the LCY Central Committee on the tasks of communists in implementing economic policy.

Answer: I was thinking first of that. I was also thinking of the resolutions of the LCY Central Committee on tasks in development of socioeconomic relations and in the distribution of income.

The resolutions of the Presidium of the LCY Central Committee were the principal impetus for the Federal Executive Council to suggest "amendments" to its own draft of the planning document during debate of the draft resolution concerning economic policy. We in the Federal Executive Council felt that our responsibility and need to offer still more concrete and radical parameters and measures pertaining to the policy of economic stabilization. Consequently, the resolutions of the Presidium of the LCY Central Committee are already having their effect.

Question: Is it too early to speak about how this subsequent intervention by the Federal Executive Council has been received?

Answer: Our subsequent proposals have led to new debates, which have not been exactly easy, there have been new confrontations of views and needs, but basically they have been accepted in political organizations, in the SFRY Assembly, and also in the republics and provinces. We in fact expected this, since we in the Federal Executive Council and our comrades in those organizations and institutions and in the republics and provinces are guided by the same policy message, that is, by the same political obligations. This is in fact the guarantee that we will be more successful in doing what we agreed on. Though there are also serious objections to the effect that the method of implementing the policy of distribution of income and personal incomes and of curtailing spending more effectively is not acceptable from the standpoint of the system. Some people feel that the method is excessively linear and does not sufficiently strengthen the responsibility of the republics and provinces and above all associated labor itself. The principal topics in the debate on economic policy set forth by the resolutions of the Presidium of the LCY Central Committee are capital formation, spending, prices and inflation, economic relations with foreign countries and structural problems in the economy. In these areas we subsequently altered the proposals and the draft resolution, and those will be the principal directions of our political and self-management activity in carrying out the policy that has been established.

Question: There has been criticism to the effect that associated labor is not enough involved in planning and therefore does not feel itself sufficiently responsible for fulfillment of plans. What do you think about that?

Answer: Certainly there is quite a bit of truth in it. That is, planning documents are still primarily formulated in the republics and provinces and in the Federation, whether they be annual or medium-term. They still do not arise sufficiently out of the self-management planning documents of associated labor. To be sure, the economic chambers, general associations and similar associations participate a bit more in the creation of social plans. But on the whole we are still far from what is envisaged by the system of self-management social planning, there is not enough of what we call counterplanning and reconciliation of plans. And that being the case, then associated labor truly does not feel sufficiently responsible for fulfillment of the plans of sociopolitical communities.

The other part of the truth is that the units of associated labor still have not seriously undertaken self-management planning and the conclusion of mutual accords and agreements, which is a presupposition of the system.

# Inertia From the Past

Question: The Federal Executive Council and federal administrative agencies are frequently criticized because of adverse circumstances in the market and in economic activity generally. How sound do you think that criticism is?

Answer: Some of that criticism is justified, since we really have not reacted effectively enough to certain demands and circumstances on the market and in that price sector which lies in our jurisdiction. This contributed to certain disturbances in supply, and we therefore have no right to be angered by criticisms of that kind which are frequently addressed to us.

However, a part of the competence and tasks, especially when it comes to supply and the market, is being unjustifiably and unnaturally retained in the Federal Executive Council and in the federal administration. To a far greater extent this ought to be the task and jurisdiction of associated labor, the republics, the provinces, cities and opstinas. In that case the reasons for nervousness and anger would be less frequent, since the flows in economic activity would be more normal. Let us take only the unfortunate example of coffee. It has turned out that the supply of coffee to the market depends exclusively on the good will and understanding of the Federal Executive Council. When it is willing, then we have coffee, when it is not, we don't. Why should the Federal Executive Council add even that to its burden? Personally, I am absolutely convinced that it is because we have not altogether organized and distributed tasks and competencies in accordance with the constitution, law and agreement. This process should be speeded up, then we will not be angered at one another so much, we will do more work and we will bear more specific responsibility.

What can we and the Federal Executive Council do, say, if certain self-managed special-interest or trade communities for the supply of cities do not perform their tasks as they should or if they have not even been set up yet? What happens if regions and centers of consumption cut themselves off, paying no heed to our commitments as a community to the unified Yugo-slav market? There is not much we can do in such a case, but we usually get the criticism because of the disturbances, because of inertia from the past. The Federal Executive Council has been frequently criticized just as it was 10 or 15 years ago when the federal government had an altogether different position.

I don't mean to say that the Federal Executive Council is working irreproachably and that there is no need to criticize its oversights and ineffectiveness. On the contrary. We welcome every suggestion, especially if it is reasonable and well-argued and if it has to do with our rights and obligations.

Question: It is our understanding that the arrangements embodying the system are being mentioned repeatedly in the debates concerning economic activity. It is usually said that slowness to adopt certain solutions is hampering production and detracting from the economy's results. What is the biggest trouble at this point—the lack of solutions or inconsistency and not enough persistence in implementing the solutions that have been adopted?

Answer: The biggest problem, from the economic and political standpoint, is unquestionably that we have not been consistent and effective in carrying out the constitution and the arrangements embodying the system, some of which were adopted 3 or 4 years ago. This is one of the reasons for the standstill in development of socioeconomic relations and for many disturbances in the material flows of social reproduction. There are also many factors that bear responsibility for this situation, beginning with the basic organization of associated labor, including the republics and provinces, and ending with the Federal Executive Council.

We have all been disproportionately preoccupied with the formal and organizational aspect of the features embodying the system, and we have been doing little to actually them. We still have not truly even undertaken this job, but we already hear criticism and suggestions that we must "wait and see," it is time to "reassess certain elements of the system," even in those sectors where we have not even begun to carry out the new solutions. There have been obvious delays in applying the system of economic relations with foreign countries, in the free exchange of labor, in the banking and monetary systems, and so on.

I do not mean by this that we should be hasty in adopting the remaining elements of the system. After all, we have now brought work on the price system and public price controls to the end, work will soon be completed on the draft of the Law on Expanded Reproduction, and certain other acts as

well. But I emphasize that the principal elements of the system already exist and that we can and should move faster in applying them.

Every Measure to the Benefit of Associated Labor

Question: There are guesses to the effect that there will be new and exceptional measures taken by the Federal Executive Council. Can you say something about that?

Answer: I personally think that it would be good in certain areas to take exceptional steps on the basis of Article 267 of the SFRY Constitution, which states the conditions and criteria for the application of such measures if the material flows in social reproduction should be seriously disrupted.

In answers to the previous questions I have spoken about the disturbances at least some of which require certain exceptional measures in my opinion. Work is in fact being done along those lines in the Federal Executive Council. This work is still in the internal phases. When we complete that phase, we will offer this for broader verification. In any case we will not undertake anything very broad, nor is there any need. We will aim at only what is indispensable: for example, in the domain of certain forms of spending, and perhaps also in certain sectors if the situation should require.

It seems to me better for the economy and for society if exceptional measures, as we call them for short, put a stop to certain of the most adverse trends and circumstances than for us to stand pat too long and ponder the forms of the steps and the manner in which they should be taken. It is better, then, for us to take exceptional steps in a particular interval of time, with all the responsibility of the Federal Executive Council as proponent and of the SFRY Assembly which would have to accept them, than to let things go their own way. The aim of measures of this kind is to create conditions in a particular time interval for a broader action by the subjective forces, both political and professional, so that over a longer stretch we can solve the problems more effectively through normal self-management channels.

Question: You mean in the interest of associated labor?

Answer: Absolutely. Why should the state not come on the scene in these cases as an instrument of the working class and of associated labor organized according to the principles of self-management? Provided that there are sufficiently "strong" reasons and sound arguments for this and provided that the bodies and agencies of the government will be responsible for what they do. We do have rules in the system, but we also have exceptions. What we are talking about is one of the exceptions.

Question: In conclusion, since you are a man who has been directly concerned with the questions of economic development in the Federal Executive Council, what would you recommend at the outset of the year to members of the League of Communists and to organizations of associated labor?

Answer: What would I say to them? To put it a different way, what should we do jointly, and how should we do it? Well, first of all we should study carefully the resolutions of the Presidium of the LCY Central Committee concerning our tasks in this economic situation. And then each of us should draw from those resolutions, apply to the specific situation in which he lives and works his own lessons and specific tasks. In no case should we go on repeating our commitments and "pledges" that we will stabilize the economy more rapidly, while we keep on in the same old way. We can put an end to that type of behavior only if everyone's responsibility for every oversight, failure or mistake that detracts from the overall results of economic activity is established and made known.

In short, it means for us members of the League of Communists a kind of state of political mobilization in which there is a great deal of work for each one of us. As to how much each shall do and how he shall do it, this should be decided, as it certainly will, by the organizations and bodies of the League of Communists, by workers in associated labor and by citizens.

7045

CSO: 2800

END

# END OF FICHE DATE FILMED May 1980

